STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐
(highlight changes)

APPLICATION FOR PERMIT TO DRILL

5. MINERAL LEASE NO: ML-48045	6. SURFACE: State
1A. TYPE OF WORK: DRILL ☑ REENTER ☐ DEEPEN ☐	7. IF INDIAN, ALLOTTEE OR TRIBE NAME: NA
B. TYPE OF WELL: OIL ☐ GAS ☑ OTHER _____ SINGLE ZONE ☐ MULTIPLE ZONE ☑	8. UNIT or CA AGREEMENT NAME: NA
2. NAME OF OPERATOR: National Fuel Corporation (Dianne Thompson 676-6775)	9. WELL NAME and NUMBER: Horse Point State #13-1
3. ADDRESS OF OPERATOR: 8400 E Prentice #1100 CITY Greenwood Vill STATE Co ZIP 80111 / PHONE NUMBER: (303) 220-7772	10. FIELD AND POOL, OR WILDCAT: ~~Wildcat~~ Undesignated
4. LOCATION OF WELL (FOOTAGES) 643317 X 4367252 Y 39.444789 -109.334504 AT SURFACE: 2630'FSL 942 FWL AT PROPOSED PRODUCING ZONE: 1450' FSL 740' FWL 643261 X 4366891 Y 39.441551 -109.335245	11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNW 1 16S 23E
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 59.9 miles from Ouray, Utah	12. COUNTY: Grand / 13. STATE: UTAH

15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET)	16. NUMBER OF ACRES IN LEASE:	17. NUMBER OF ACRES ASSIGNED TO THIS WELL:
740'	917.25	Not Spaced
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET)	**19. PROPOSED DEPTH:**	**20. BOND DESCRIPTION:**
NA	8,182	Statewide - 04127314
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.):	**22. APPROXIMATE DATE WORK WILL START:**	**23. ESTIMATED DURATION:**
7449.5 GR	6/30/2008	30 Days

24. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT			SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT			
17 1/2"	13 3/8"	H-40	48#	60	Class G	75sx	1.15 cu ft/sk	15.8
12 1/4"	9 5/8"	J-55	36#	1,000	Class G	410sx	1.15 cu ft/sk	15.8
7 7/8"	4 1/2"	N-80	11.6#	8,182	Elastaseal Foamed	1220sx	1.47 cu ft/sk	11

RECEIVED
MAY 21 2008
DIV. OF OIL, GAS & MINING

25. **ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

- ☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
- ☑ EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER
- ☑ COMPLETE DRILLING PLAN
- ☐ FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Andrew Busch TITLE V.P. of Operations

SIGNATURE Andrew Busch DATE 5/15/2008

(This space for State use only)

API NUMBER ASSIGNED: 43-019-31579

APPROVAL:

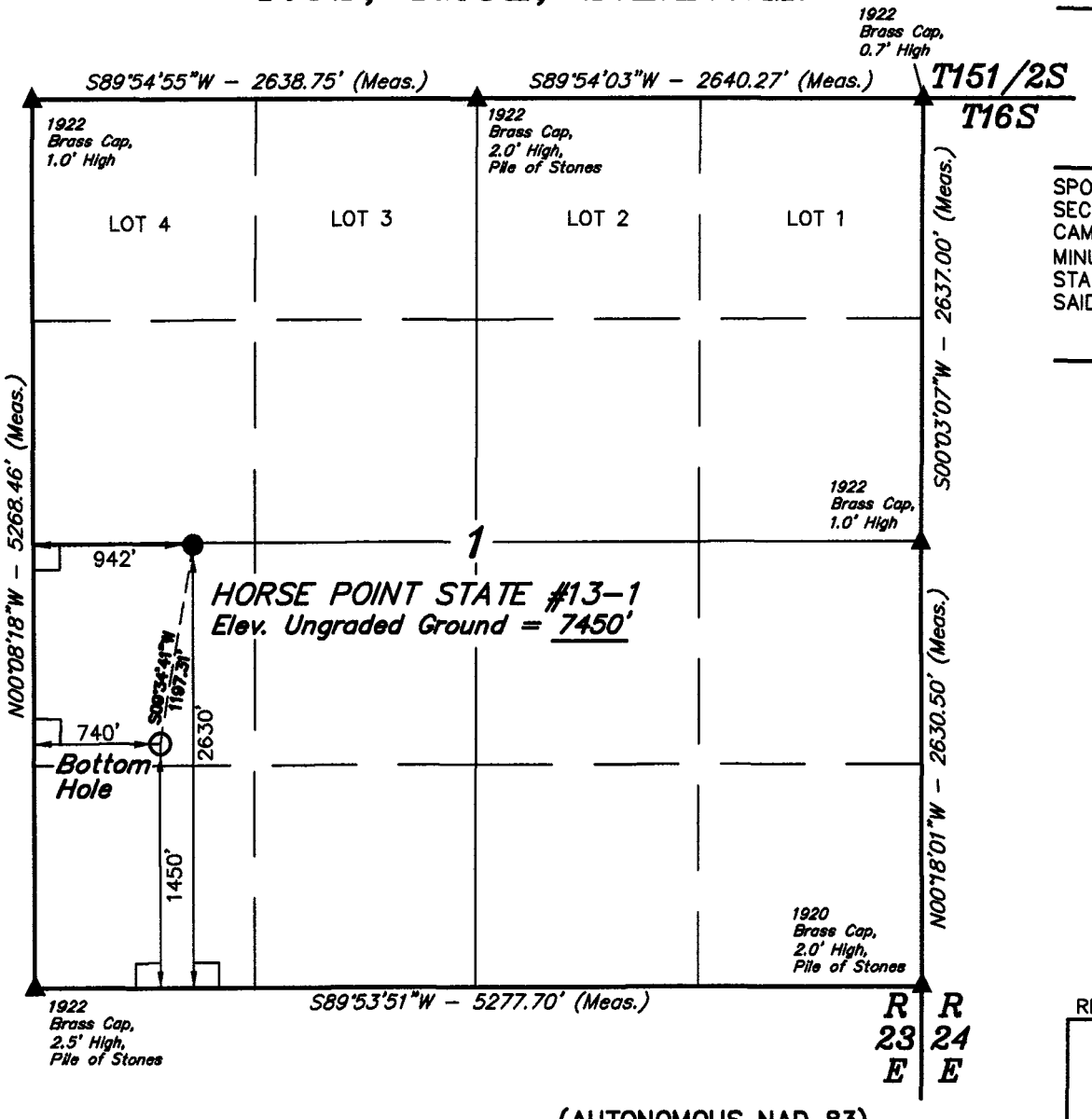
Approved by the Utah Division of Oil, Gas and Mining

Date: 06-10-08

By:

(11/2001) (See Instructions on Reverse Side)

T16S, R23E, S.L.B.&M.



NATIONAL FUEL COPRORATION

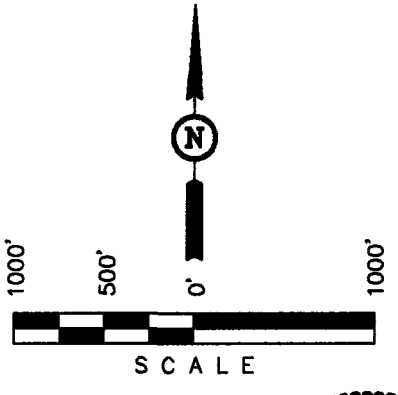
Well location, HORSE POINT STATE #13-1, located as shown in the SW 1/4 NW 1/4 of Section 1, T16S, R23E, S.L.B.&M., Grand County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION LOCATED AT THE SOUTHEAST CORNER OF SECTION 30, T15S, R22E, S.L.B.&M. TAKEN FROM THE CEDAR CAMP CANYON, QUADRANGLE, UTAH, GRAND COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 7454 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

REVISED: 05-15-08

(AUTONOMOUS NAD 83)
LATITUDE = 39°26'41.48" (39.444856)
LONGITUDE = 109°20'06.82" (109.335228)
(AUTONOMOUS NAD 27)
LATITUDE = 39°26'41.59" (39.444886)
LONGITUDE = 109°20'04.39" (109.334553)

LEGEND:

- └ = 90° SYMBOL
- ● = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(435) 789-1017

SCALE	DATE SURVEYED:	DATE DRAWN:
1" = 1000'	05-06-08	05-09-08
PARTY: T.A. S.K. C.H.	REFERENCES: G.L.O. PLAT	
WEATHER: WARM	FILE: NATIONAL FUEL CORPORATION	

AREA CODE 303
PHONE 220-7772

FAX
220-7773

National Fuel Corporation

8400 EAST PRENTICE AVENUE, SUITE 1100
GREENWOOD VILLAGE, COLORADO 80111-2926

May 29, 2008

VIA E-MAIL

Ms. Diana Mason
Utah Division of Oil Gas & Mining
P.O. Box 145801
Salt Lake City 84114-5801

Re: ***REVISED REQUEST FOR EXCEPTION TO RULE R643-3-11***
National Fuel Corporation APD - Horse Point State #13-1
Sec. 1-T16S-R23E (Wildcat well in target Dakota Formation; Horse Point Area)
Lease ML 48045
Grand County, Utah

Dear Ms. Mason:

This revision to our letter dated May 15 is sent to request an exception to Rule R643-3-11 for the subject proposed well and to explain the need to directionally drill the well. National Fuel Corporation chose the subsurface location based on both geological study and geophysical interpretation of seismic data. We believe the proposed location offers the best opportunity for a successful well. As may be seen on the topographic map enclosed with our original request, the topography above the subsurface target is not favorable for constructing a well pad. If our request for exception to R643-3-11 is granted, the proposed location will also mitigate surface disturbance from additional road building. *Further, there are no other owners within a 460-foot radius of the proposed location.*

We believe the proposed location complies with other well location requirements and we respectfully request that our proposed exception to R643-3-11 be granted. Please feel free to call Mr. Andy Busch at (970) 260-8128 if you have additional concerns.

Sincerely,

Diane Thompson

Diane Thompson
President
NATIONAL FUEL CORPORATION

AREA CODE 303
PHONE 220-7772

FAX
220-7773

National Fuel Corporation

8400 EAST PRENTICE AVENUE, SUITE 1100
GREENWOOD VILLAGE, COLORADO 80111-2926

May 15th, 2008

To: Utah Division of Oil Gas & Mining
P.O. Box 145801
Salt Lake City 84114-5801

Re: ***REQUEST FOR EXCEPTION TO RULE R649-3-2, 3-3***
REASON FOR INTENTIONAL DEVIATION
National Fuel Corporation Horse Point State #13-1
Sec. 1-T16S-R23E
Grand County, Utah

This letter is sent to request an exception to Rule R649-3-2, 3-3 and to explain the need for intentional deviation for the subject well. National Fuel Corporation (NFC) chose the subsurface location based on seismic data and believes that this location offers the best opportunity for a successful well. The topography above the subsurface target is not favorable for constructing a well pad. The surface location proposed will minimize new surface disturbance for the proposed subsurface target. For this reason NFC requests that an exception to R649-3-2, 3-3 be granted.

We believe the proposed location complies with other well location requirements and we respectfully request that our proposed exception to R649-3-2, 3-3 be granted. Please feel free to call me at (970) 260-8128 if you have additional concerns.

Sincerely,

Andrew Busch

Andrew Busch
V. P. of Operations
National Fuel Corporation

National Fuel Corporation

Application for Permit to Drill

NFC Horse Point State #13-1

(Tight Hole)

RECEIVED
MAY 21 2008
DIV. OF OIL, GAS & MINING

5/13/08

State of Utah, Division of Oil, Gas, and Mining
Application for Permit to Drill

Company: National Fuel Corporation Well No. Horse Point State #13-1

Location: Sec. 1, T. 16S, R. 23E, Lease No. ML-48054 45

All operations will be conducted in such a manner that full compliance is made with applicable laws, regulations, the approved plan of operations and the conditions of approval. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

A. DRILLING PROGRAM

Surface Formation and Estimated Formation Tops: TVD

Wasatch	@surface
Mesaverde	
Castlegate	4035'
Mancos	
Mancos "B"	
F3 zone	7213'
Dakota Silt	7430'
Dakota Sand	7466'
Base Dakota	7588'
Lower LK2 sand	7710'
Morrison	7762'
TD	8062'

1. Estimated Depth at Which Oil, Gas, Water or Other Mineral Bearing Zones are Expected to be Encountered

Depth/Formation

Expected Oil Zones: None

Expected Gas Zones: Mancos B, Dakota Silt, Dakota Sand, Morrison

Expected Water Zones: None

Expected Mineral Zones: None

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and will be cased and cemented. When possible, water flow rates will be measured and samples will be taken and analyzed with the results being submitted to Utah. All oil and gas shows will be tested to determine commercial potential.

2. Pressure Control Equipment – See attached schematic: Type: 11" X 3,000 psi WP, double-gate BOP and 11" X 3,000 psi WP annular BOP with hydraulic closing unit.

The blowout preventer will be equipped as follows:

1) One set of blind rams
2) One set of pipe rams
3) Drilling spool with two side outlet (choke side: 3" minimum and kill side 2" minimum)
4) Kill line: Two-inch minimum
5) Two kill line valves, one of which will be a check valve (2" minimum)
6) Choke line: Three-inch minimum.
7) Two choke line valves: Three-inch minimum.
8) One manually operated choke: Three-inch minimum.
9) Pressure gauge on choke manifold.
10) Upper kelly cock with handle readily available.
11) Full opening internal blowout preventer or drill pipe safety valve able to fit all connections.
12) Fill-up line to be located above uppermost preventer.

PRESSURE RATING: 3,000 PSI

TESTING PROCEDURE

At a minimum, the BOP, choke manifold, and related equipment will be pressure tested to the approved working pressure of the approved BOP stack. (if isolated from the surface casing by means of a test plug) or 70% of the internal yield strength of the surface casing (if not isolated from the surface casing by means of a test plug). Pressure will be maintained for a period of at least ten minutes or until requirements of the test are met, whichever is longer.

At a minimum, this pressure test will be performed:

1) When the BOP is initially installed
2) Whenever any seal subject to test is broken.
3) Following related repairs.
4) At thirty day intervals.

In addition to the above, the pipe rams will be activated daily, and the blind rams will be activated on each trip (but not more frequently than once each day). All BOP tests and drills will be recorded in the IADC Driller's Log (tour sheet)

CHOKE MANIFOLD EQUIPMENT:

All choke lines will be straight lines, unless turns use tee-blocks, or are targeted with running tees. These lines will be anchored to prevent whip and vibration.

ACCUMULATOR:

The accumulator will have sufficient capacity to close all rams (plus the annular preventer, if applicable) and maintain a minimum of 200 psi above the pre-charge pressure without the use of the closing unit pumps. The fluid reservoir capacity will be double the accumulator capacity and the fluid level will be maintain at the manufacturer's recommendation. The BOP system will have two independent power sources to close preventers. Nitrogen bottles (three minimum) will be considered one of these sources and will maintain a charge equal to the manufacturer's specifications.

The accumulator precharge pressure test will be conducted prior to connecting the closing unit to the BOP stack and at least once every six months thereafter. The accumulator pressure will be corrected

if the measured precharge pressure is found to be above or below the maximum or minimum limits of manufacturer's specifications.

MISCELLANEAUS INFORMATION:
The blowout preventer and related pressure-control equipment will be installed, tested, and maintained in compliance with the specifications in and requirements of DOGM's Drilling and Operating Practices #R649-3-7. The choke manifold and BOP extension rods will be located outside the rig sub-structure.

The hydraulic BOP closing unit will be located at least twenty-five feet from the wellhead, but will be readily accessible to the driller. Exact location and configuration of the hydraulic BOP closing unit will depend upon the particular drilling rig contracted to drill this hole.

3. Casing Program and Auxiliary Equipment – include casing size, weight, grade, thread and coupling, setting depth and condition (new or acceptably reconditioned):

Conductor csg.-	New	13 3/8" 48# , H-40, ST&C,	60' to Surface
Surface csg.-	New	9 5/8", 36# , J-55, ST&C,	1000' to Surface
Production csg.-	New	4 ½" , 11.6#, N-80,ST&C	8182' to Surface

4. Cement – include the cement type, density, yield, additives and amount used in setting each casing string. Also include the anticipated cement fill-up. If stage cementing, describe techniques:
13 3/8" csg. – 75sx Regular Class G cement, 1.15 cu ft/sk, 15.8 ppg, 60' to surface.
9 5/8" csg. - 410sx Regular Class G cement, 1.15 cu ft/sk, 15.8 ppg, 1000' to surface.
4 ½" csg. – 1220sx Elastaseal Foamed cement, 1.47 cu ft/sk, 11 ppg, 8182' to 1000'
Surface casing shall be cemented back to surface. Centralizers shall be run, at a minimum, on the bottom three joints of each casing string.

5. Mud Program and Circulating Medium – Anticipate drilling surface and intermediate with air. Production hole will be drilled with a Diammonium Phosphate (DAP) fluid system. Sufficient mud materials will be stored on location to maintain well control and combat lost circulation problems that might reasonably be expected. 10 ppg mud wt. per Diane Thompson 5/29/08

6. Coring, Logging and Testing Program: No DST or core anticipated. Logging program: CNL/LDT/LSS w/ XY caliper and DLL. Open hole logs will be run from TD to 3500'. All good gas and/or oil shows will be tested when perforated through production csg.
Initial opening of drill stem test tools will be restricted to daylight hours.

7. Abnormal Conditions, Bottom Hole Pressures and Potential Hazards – include anticipated bottomhole pressure and/or pressure gradient. Also list anticipated lost circulation zones, abnormal temperature zones and possible hydrogen sulfide bearing zones: No abnormal conditions, pressures, temperatures or hazards are anticipated and are not common in this area. No H2S anticipated and does not exist in other wells in the area. Based on information from other wells in the area, max BHP not expected to exceed 3000#. 1820# MABHP as above

8. Any Other Aspects of this Proposal that should be Addressed: _____
Anticipated time frames for: Construction and Drilling - 20 to 25 days
Completion and Testing - 10 to 15 days

B. SURFACE USE PLAN

The dirt contractor will be provided with an approved copy of the surface use plan of operations before initiating construction. Surface disturbance and vehicular travel will be limited to the approved location and access road.

1. Existing Roads:

a. Proposed route to location (submit a map depicting access and well location).
See attached maps and plats from ULES.

b. Location of proposed well in relation to town or other reference point:
See attached maps and plats from ULES.

c. Contact the County Road Department for use of county roads.

d. Plans for improvement and/or maintenance of existing roads: Existing road will be graded if needed. Current road will be adequate without improvements.

e. Other: _____

2. Planned Access Roads:

a. Location (centerline): See on map attached to survey plat.

b. Length of new access to be constructed: 80 feet

c. Length of existing roads to be upgraded: 0 miles

d. Maximum total disturbed width: 50 feet

e. Maximum travel surface width: 20 feet

f. Maximum grades: 10% or less

g. Turnouts: No additional turnouts needed.

h. Surface materials: No off-site materials anticipated.

i. Drainage (crowning, ditching, culverts, etc.): No drainage crossings will be needed for access route. Access road will be crowned and drainage ditches cut as necessary to provide adequate drianage.

Surface disturbance and vehicular travel will be limited to the approved location and access road. Any additional area needed must be approved by the Area Manager in advance.

3. Location of Production Facilities:

   a. On-site facilities: Wellhead, meter facilities, separator, dehydrator, production tank and fenced emergency water disposal pit. Details of needed facilities will be submitted if well is completed for production.

   b. Off-site facilities: None

      Pipelines: If gas production is established, a new 3" steel gathering line will be laid to existing 8" steel buried line in Horse Canyon Southeast of proposed location. See attached maps and plats from ULES.

   c.
   All permanent (in place for six months or longer) structures constructed or installed (including oil well pump jacks) will be painted a flat, nonreflective color to match the standard environmental colors, as determined by the Rocky Mountain Five-State Interagency Committee. All facilities will be painted within six months of installation.

   All site security guidelines identified in 43 CFR § 3162.7-5 and Onshore Oil and Gas Order No. 3 shall be followed.

   If a gas meter run is constructed, it will be located on lease within 500 feet of the wellhead. The gas flowline will be buried from the wellhead to the meter and will be buried downstream of the meter until it leaves the pad. Meter runs will be housed and/or fenced. The gas meter shall be calibrated prior to first sales and shall be calibrated quarterly thereafter. All gas production and measurement shall comply with the provisions of 43 CFR § 3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.

   If a tank battery is constructed on this lease, it will be surrounded by a berm of sufficient capacity to contain 1 ½ times the storage capacity of the largest tank. All loading lines and valves will be placed inside the berm surrounding the tank battery. All oil production and measurement shall conform to the provisions of 43 CFR § 3162.7-3 and Onshore Oil and Gas Order No. 4.

4. Location and Type of Water Supply:

   All water needed for drilling purposes will be obtained from (describe location and/or show on a map): Water for drilling and completion operations will be purchased from rancher Bert Delambert and taken from a pond on his property located in Main Canyon in the center of the E ½, E ½ Section 31-T15S-R23E, Uintah Co., Utah. Water Right #49-123, App. #T-14298, Cert. #1504. See attached map showing water source location.

5. Source of Construction Material:

Pad construction material will be obtained from (if the source is Federally owned, show location on a map): Native materials. All on site.

The reserve pit shall be located in cut material, with at least 50% of the pit volume being below original ground level. Three sides of the reserve pit will be fenced before drilling starts. The fourth side will be fenced as soon as drilling is completed, and shall remain until the pit is dry. As soon as the reserve pit has dried, all areas not needed for production will be rehabilitated.

Trash must be contained in a trash cage and hauled away to an approved disposal site as necessary, but no later than at the completion of drilling operations.

Sewage will be contained in approved containers and disposed of at an approved disposal site.

6. Ancillary Facilities: None required. Anticipate up to 3 living trailers for rig personel during drilling and completion.

Well Site Layout – depict the pit, rig, cut and fill, topsoil, etc., on a plat with a scale of at least 1" = 50'. See attached maps and plats from ULES.

The blooie line will be located at least 100 feet from the well head.

To minimize the amount of fugitive dust and spray escaping from the blooie pit, the following blooie line deflection method will be employed: Blooie line will be directed into the base of the dirt embankment surrounding the blooie pit.

7. Plans for Restoration of the Surface:

The top 5 inches of topsoil material will be removed from the location and stockpiled separately on: The East end of the location. See survey plat.

Immediately upon completion of drilling, all equipment that is not necessary for production shall be removed.

The reserve pit and that portion of the location not needed for production will be reclaimed.

Before any dirt work to restore the location takes place, the reserve pit must be completely dry.

All road surfacing will be removed prior to the rehabilitation of roads.

Reclaimed roads will have the berms and cuts reduced and will be closed to vehicle use.

All disturbed areas will be recontoured to replicate the natural slope.

The stockpiled topsoil will be evenly distributed over the disturbed area.

Prior to reseeding, all disturbed areas, including the access roads, will be scarified and left with a rough surface.

Seed will be broadcast or drilled between Sept 1st and Dec 31st, or at a time specified by the State of Utah. If broadcast, a harrow or some other implement will be dragged over the seeded area to assure seed coverage.

The following seed mixture will be used: As specified by State.

The abandonment marker will be one of the following, as specified by the State:

1) at restored ground level, or
2) below ground level.

In any case, the marker shall be inscribed with the following: operator name, lease number, well name and surveyed description (township, range, section and either quarter-quarter or footages).

8. Surface and Mineral Ownership: State surface and mineral ownership.

9. Other Information:

   a. Archeological Concerns: A cultural and archaeological survey will be performed on the new well site and access road to location. Results will be forwarded to the State of Utah for review.

   The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the authorized officer (AO). Within five (5) working days, the AO will inform the operator as to:

   - whether the materials appear eligible for the National Register of Historic Places;
   - the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and
   - a time frame for the AO to complete an expedited review under 36 CFR § 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume

responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

b. Threatened and Endangered Species Concerns: None

c. Wildlife Seasonal Restrictions (yes/no): As specified by State of Utah.

d. Off Location Geophysical Testing: None

e. Drainage crossings that require additional State or Federal approval: None

10. Lessee's or Operator's Representative and Certification

Representative:

Name: Andrew W. Busch, Fruita Office (970)858-7490, Cell (970) 260-8128

Title: V.P. of Operations

Address: 8400 E. Prentice Ave., Suite #1100
Greenwood Village, Co. 80111

Phone Number: (303)220-7772

Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by National Fuel Corporation and its contractors and subcontractors in conformity with this APD package and the terms and conditions under which it is approved. I also certify responsibility for the operations conducted on that portion of the leased lands associated with this application, with bond coverage being provided under Utah Statewide Blanket Drilling Bond no. 04127314.

Andrew W. Busch
Signature

Vice President of Operations
Title

May 15th, 2008
Date

Weatherford

Drilling Services

Proposal

NATIONAL FUEL CORPORATION

HORSE POINT STATE #13-1
FILE: PLAN 2
MAY 19, 2008

Weatherford International Ltd.
2000 Oil Drive
Casper, Wyoming 82604
+1.307.265.1413 Main
+1.307.235.3958 Fax
www.weatherford.com

NATIONAL FUEL CORPORATION
HORSE POINT STATE #13-1
SEC 1-T16S-R23[redacted] E
GRAND COUNTY,UT

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	189.58	0.00	0.00	0.00	0.00	0.00	0.00	
2	1100.00	0.00	189.58	1100.00	0.00	0.00	0.00	0.00	0.00	
3	1689.25	11.79	189.58	1685.11	-59.55	-10.05	2.00	189.58	60.39	
4	6960.15	11.79	189.58	6844.89	-1121.07	-189.17	0.00	0.00	1136.92	
5	7549.40	0.00	189.58	7430.00	-1180.62	-199.22	2.00	180.00	1197.31	
6	8181.40	0.00	189.58	8062.00	-1180.62	-199.22	0.00	189.58	1197.31	PBHL

WELL DETAILS

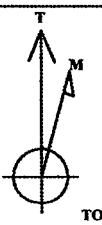
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
HORSE POINT STATE #13-1	0.00	0.00	6973932.64	2251685.56	39°26'41.480N	109°20'06.820W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	8062.00	-1180.62	-199.22	6972747.54	2251514.97	Point

FORMATION TOP DETAILS

No.	TVDPath	MDPath	Formation
1	4035.00	4089.75	CASTLEGATE
2	7213.00	7332.19	F3 ZONE
3	7430.00	7549.40	DAKOTA SILT
4	7466.00	7585.40	DAKOTA SAND
5	7588.00	7707.40	BASE DAKOTA
6	7710.00	7829.40	LOWER LK2 SAND
7	7762.00	7881.40	MORRISON



Azimuths to True North
Magnetic North: 11.35°

Magnetic Field
Strength: 52385nT
Dip Angle: 65.52°
Date: 5/19/2008
Model: bggm2007

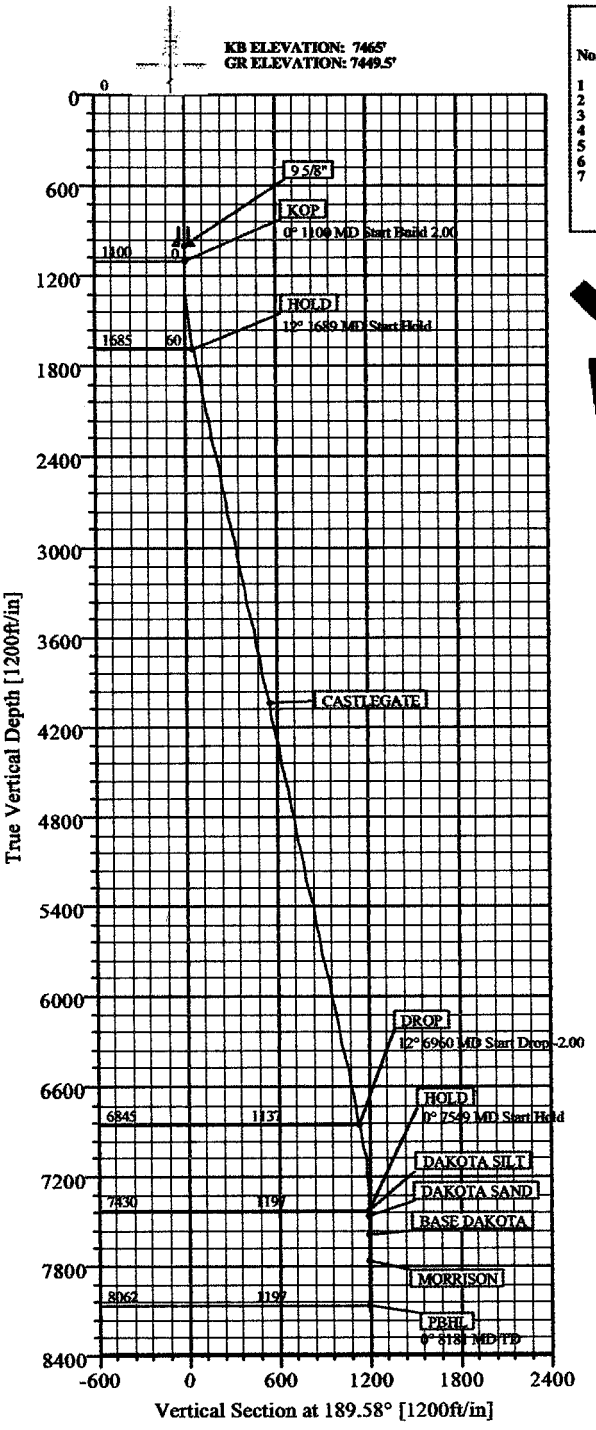
TOTAL CORRECTION TRUE NORTH 11.35°

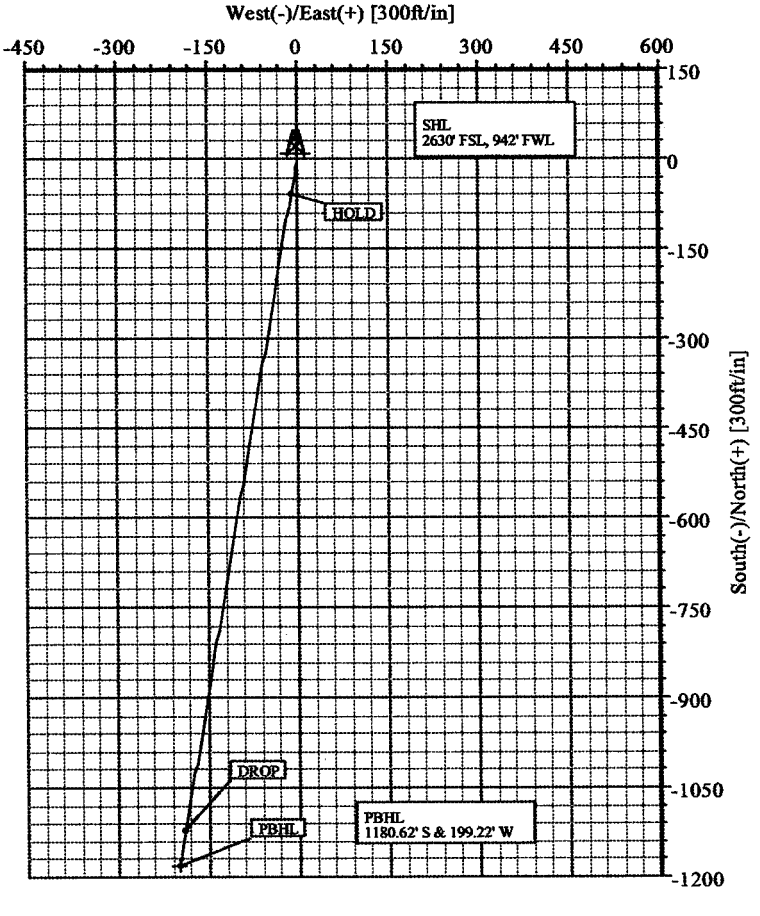
FIELD DETAILS

GRAND COUNTY, UTAH

Geodetic System: US State Plane Coordinate System 1983
Ellipsoid: GRS 1980
Zone: Utah, Central Zone
Magnetic Model: bggm2007

System Datum: Mean Sea Level
Local North: True North





Plan: Plan #2 (HORSE POINT STATE #13-1/1)
Created By: Tracy R. Williams Date: 5/19/2008

Weatherford International Ltd.
DIRECTIONAL PLAN REPORT

Weatherford

Company:	NATIONAL FUEL CORPORATION	**Date:** 5/19/2008 **Time:** 16:18:41	**Page:** 1
Field:	GRAND COUNTY, UTAH	**Co-ordinate(NE) Reference:**	Well: HORSE POINT STATE #13-1, True Nort
Site:	HORSE POINT STATE #13-1	**Vertical (TVD) Reference:**	SITE 7465.0
Well:	HORSE POINT STATE #13-1	**Section (VS) Reference:**	Well (0.00N,0.00E,189.58Azi)
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature **Db:** Sybase

Plan:	Plan #2	**Date Composed:**	5/15/2008
		Version:	1
Principal:	Yes	**Tied-to:**	From Surface

Field:	GRAND COUNTY, UTAH		
Map System:	US State Plane Coordinate System 1983	**Map Zone:**	Utah, Central Zone
Geo Datum:	GRS 1980	**Coordinate System:**	Well Centre
Sys Datum:	Mean Sea Level	**Geomagnetic Model:**	bggm2007

Site:	HORSE POINT STATE #13-1								
Site Position:			**Northing:**	6973932.64	ft	**Latitude:**	39 26 41.480	N	
From:	Geographic		**Easting:**	2251685.56	ft	**Longitude:**	109 20 6.820	W	
Position Uncertainty:		0.00 ft				**North Reference:**		True	
Ground Level:		7449.50 ft				**Grid Convergence:**		1.39 deg	

Well:	HORSE POINT STATE #13-1					**Slot Name:**			
Well Position:	+N/-S	0.00 ft	**Northing:**	6973932.64	ft	**Latitude:**	39 26 41.480	N	
	+E/-W	0.00 ft	**Easting :**	2251685.56	ft	**Longitude:**	109 20 6.820	W	
Position Uncertainty:		0.00 ft							

Wellpath:	1		**Drilled From:**	Surface	
			Tie-on Depth:	0.00	ft
Current Datum:	SITE	**Height** 7465.00 ft	**Above System Datum:**	Mean Sea Level	
Magnetic Data:	5/19/2008		**Declination:**	11.35	deg
Field Strength:	52385 nT		**Mag Dip Angle:**	65.52	deg

Vertical Section:	**Depth From (TVD)**	**+N/-S**	**+E/-W**	**Direction**
	ft	ft	ft	deg
	0.00	0.00	0.00	189.58

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	189.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1100.00	0.00	189.58	1100.00	0.00	0.00	0.00	0.00	0.00	0.00	
1689.25	11.79	189.58	1685.11	-59.55	-10.05	2.00	2.00	0.00	189.58	
6960.15	11.79	189.58	6844.89	-1121.07	-189.17	0.00	0.00	0.00	0.00	
7549.40	0.00	189.58	7430.00	-1180.62	-199.22	2.00	-2.00	0.00	180.00	
8181.40	0.00	189.58	8062.00	-1180.62	-199.22	0.00	0.00	0.00	189.58	PBHL

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Comment
0.00	0.00	189.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	189.58	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	189.58	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	189.58	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	189.58	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	189.58	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	189.58	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	189.58	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	189.58	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	189.58	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
1000.00	0.00	189.58	1000.00	0.00	0.00	0.00	0.00	0.00	0.00	9 5/8"
1100.00	0.00	189.58	1100.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP
1200.00	2.00	189.58	1199.98	-1.72	-0.29	1.75	2.00	2.00	0.00	
1300.00	4.00	189.58	1299.84	-6.88	-1.16	6.98	2.00	2.00	0.00	
1400.00	6.00	189.58	1399.45	-15.47	-2.61	15.69	2.00	2.00	0.00	

Weatherford International Ltd.

DIRECTIONAL PLAN REPORT

Weatherford

Company:	NATIONAL FUEL CORPORATION	**Date:** 5/19/2008 **Time:** 16:18:41	**Page:** 2
Field:	GRAND COUNTY, UTAH	**Co-ordinate(NE) Reference:**	Well: HORSE POINT STATE #13-1, True Nort
Site:	HORSE POINT STATE #13-1	**Vertical (TVD) Reference:**	SITE 7465.0
Well:	HORSE POINT STATE #13-1	**Section (VS) Reference:**	Well (0.00N,0.00E,189.58Azi)
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature **Db:** Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Comment
1500.00	8.00	189.58	1498.70	-27.49	-4.64	27.88	2.00	2.00	0.00	
1600.00	10.00	189.58	1597.47	-42.92	-7.24	43.52	2.00	2.00	0.00	
1689.25	11.79	189.58	1685.11	-59.55	-10.05	60.39	2.00	2.00	0.00	HOLD
1700.00	11.79	189.58	1695.63	-61.71	-10.41	62.58	0.00	0.00	0.00	
1800.00	11.79	189.58	1793.52	-81.85	-13.81	83.01	0.00	0.00	0.00	
1900.00	11.79	189.58	1891.41	-101.99	-17.21	103.43	0.00	0.00	0.00	
2000.00	11.79	189.58	1989.30	-122.13	-20.61	123.86	0.00	0.00	0.00	
2100.00	11.79	189.58	2087.20	-142.27	-24.01	144.28	0.00	0.00	0.00	
2200.00	11.79	189.58	2185.09	-162.41	-27.41	164.70	0.00	0.00	0.00	
2300.00	11.79	189.58	2282.98	-182.55	-30.80	185.13	0.00	0.00	0.00	
2400.00	11.79	189.58	2380.87	-202.69	-34.20	205.55	0.00	0.00	0.00	
2500.00	11.79	189.58	2478.76	-222.83	-37.60	225.98	0.00	0.00	0.00	
2600.00	11.79	189.58	2576.66	-242.97	-41.00	246.40	0.00	0.00	0.00	
2700.00	11.79	189.58	2674.55	-263.10	-44.40	266.82	0.00	0.00	0.00	
2800.00	11.79	189.58	2772.44	-283.24	-47.80	287.25	0.00	0.00	0.00	
2900.00	11.79	189.58	2870.33	-303.38	-51.19	307.67	0.00	0.00	0.00	
3000.00	11.79	189.58	2968.22	-323.52	-54.59	328.10	0.00	0.00	0.00	
3100.00	11.79	189.58	3066.12	-343.66	-57.99	348.52	0.00	0.00	0.00	
3200.00	11.79	189.58	3164.01	-363.80	-61.39	368.94	0.00	0.00	0.00	
3300.00	11.79	189.58	3261.90	-383.94	-64.79	389.37	0.00	0.00	0.00	
3400.00	11.79	189.58	3359.79	-404.08	-68.19	409.79	0.00	0.00	0.00	
3500.00	11.79	189.58	3457.68	-424.22	-71.58	430.22	0.00	0.00	0.00	
3600.00	11.79	189.58	3555.58	-444.36	-74.98	450.64	0.00	0.00	0.00	
3700.00	11.79	189.58	3653.47	-464.50	-78.38	471.07	0.00	0.00	0.00	
3800.00	11.79	189.58	3751.36	-484.64	-81.78	491.49	0.00	0.00	0.00	
3900.00	11.79	189.58	3849.25	-504.78	-85.18	511.91	0.00	0.00	0.00	
4000.00	11.79	189.58	3947.14	-524.92	-88.58	532.34	0.00	0.00	0.00	
4089.75	11.79	189.58	4035.00	-542.99	-91.63	550.67	0.00	0.00	0.00	CASTLEGATE
4100.00	11.79	189.58	4045.04	-545.06	-91.97	552.76	0.00	0.00	0.00	
4200.00	11.79	189.58	4142.93	-565.20	-95.37	573.19	0.00	0.00	0.00	
4300.00	11.79	189.58	4240.82	-585.34	-98.77	593.61	0.00	0.00	0.00	
4400.00	11.79	189.58	4338.71	-605.47	-102.17	614.03	0.00	0.00	0.00	
4500.00	11.79	189.58	4436.60	-625.61	-105.57	634.46	0.00	0.00	0.00	
4600.00	11.79	189.58	4534.50	-645.75	-108.97	654.88	0.00	0.00	0.00	
4700.00	11.79	189.58	4632.39	-665.89	-112.36	675.31	0.00	0.00	0.00	
4800.00	11.79	189.58	4730.28	-686.03	-115.76	695.73	0.00	0.00	0.00	
4900.00	11.79	189.58	4828.17	-706.17	-119.16	716.16	0.00	0.00	0.00	
5000.00	11.79	189.58	4926.07	-726.31	-122.56	736.58	0.00	0.00	0.00	
5100.00	11.79	189.58	5023.96	-746.45	-125.96	757.00	0.00	0.00	0.00	
5200.00	11.79	189.58	5121.85	-766.59	-129.36	777.43	0.00	0.00	0.00	
5300.00	11.79	189.58	5219.74	-786.73	-132.75	797.85	0.00	0.00	0.00	
5400.00	11.79	189.58	5317.63	-806.87	-136.15	818.28	0.00	0.00	0.00	
5500.00	11.79	189.58	5415.53	-827.01	-139.55	838.70	0.00	0.00	0.00	
5600.00	11.79	189.58	5513.42	-847.15	-142.95	859.12	0.00	0.00	0.00	
5700.00	11.79	189.58	5611.31	-867.29	-146.35	879.55	0.00	0.00	0.00	
5800.00	11.79	189.58	5709.20	-887.43	-149.75	899.97	0.00	0.00	0.00	
5900.00	11.79	189.58	5807.09	-907.57	-153.14	920.40	0.00	0.00	0.00	
6000.00	11.79	189.58	5904.99	-927.71	-156.54	940.82	0.00	0.00	0.00	
6100.00	11.79	189.58	6002.88	-947.84	-159.94	961.24	0.00	0.00	0.00	
6200.00	11.79	189.58	6100.77	-967.98	-163.34	981.67	0.00	0.00	0.00	
6300.00	11.79	189.58	6198.66	-988.12	-166.74	1002.09	0.00	0.00	0.00	
6400.00	11.79	189.58	6296.55	-1008.26	-170.14	1022.52	0.00	0.00	0.00	
6500.00	11.79	189.58	6394.45	-1028.40	-173.54	1042.94	0.00	0.00	0.00	

Weatherford International Ltd.
DIRECTIONAL PLAN REPORT

Weatherford

Company:	NATIONAL FUEL CORPORATION	**Date:** 5/19/2008 **Time:** 16:18:41	**Page:** 3
Field:	GRAND COUNTY, UTAH	**Co-ordinate(NE) Reference:**	Well: HORSE POINT STATE #13-1, True Nort
Site:	HORSE POINT STATE #13-1	**Vertical (TVD) Reference:**	SITE 7465.0
Well:	HORSE POINT STATE #13-1	**Section (VS) Reference:**	Well (0.00N,0.00E,189.58Azi)
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature **Db:** Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Comment
6600.00	11.79	189.58	6492.34	-1048.54	-176.93	1063.37	0.00	0.00	0.00	
6700.00	11.79	189.58	6590.23	-1068.68	-180.33	1083.79	0.00	0.00	0.00	
6800.00	11.79	189.58	6688.12	-1088.82	-183.73	1104.21	0.00	0.00	0.00	
6900.00	11.79	189.58	6786.01	-1108.96	-187.13	1124.64	0.00	0.00	0.00	
6960.15	11.79	189.58	6844.89	-1121.07	-189.17	1136.92	0.00	0.00	0.00	DROP
7000.00	10.99	189.58	6883.96	-1128.83	-190.48	1144.79	2.00	-2.00	0.00	
7100.00	8.99	189.58	6982.44	-1145.93	-193.37	1162.13	2.00	-2.00	0.00	
7200.00	6.99	189.58	7081.47	-1159.64	-195.68	1176.03	2.00	-2.00	0.00	
7300.00	4.99	189.58	7180.92	-1169.92	-197.42	1186.46	2.00	-2.00	0.00	
7332.19	4.34	189.58	7213.00	-1172.50	-197.85	1189.08	2.00	-2.00	0.00	F3 ZONE
7400.00	2.99	189.58	7280.67	-1176.78	-198.57	1193.42	2.00	-2.00	0.00	
7500.00	0.99	189.58	7380.60	-1180.20	-199.15	1196.88	2.00	-2.00	0.00	
7549.40	0.00	189.58	7430.00	-1180.62	-199.22	1197.31	2.00	-2.00	0.00	DAKOTA SILT
7585.40	0.00	189.58	7466.00	-1180.62	-199.22	1197.31	0.00	0.00	0.00	DAKOTA SAND
7600.00	0.00	189.58	7480.60	-1180.62	-199.22	1197.31	0.00	0.00	0.00	
7700.00	0.00	189.58	7580.60	-1180.62	-199.22	1197.31	0.00	0.00	0.00	
7707.40	0.00	189.58	7588.00	-1180.62	-199.22	1197.31	0.00	0.00	0.00	BASE DAKOTA
7800.00	0.00	189.58	7680.60	-1180.62	-199.22	1197.31	0.00	0.00	0.00	
7829.40	0.00	189.58	7710.00	-1180.62	-199.22	1197.31	0.00	0.00	0.00	LOWER LK2 SAND
7881.40	0.00	189.58	7762.00	-1180.62	-199.22	1197.31	0.00	0.00	0.00	MORRISON
7900.00	0.00	189.58	7780.60	-1180.62	-199.22	1197.31	0.00	0.00	0.00	
8000.00	0.00	189.58	7880.60	-1180.62	-199.22	1197.31	0.00	0.00	0.00	
8100.00	0.00	189.58	7980.60	-1180.62	-199.22	1197.31	0.00	0.00	0.00	
8180.40	0.00	189.58	8061.00	-1180.62	-199.22	1197.31	0.00	0.00	0.00	PBHL
8181.40	0.00	189.58	8062.00	-1180.62	-199.22	1197.31	0.00	0.00	0.00	PBHL

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<---- Latitude ----> Deg	Min	Sec	<--- Longitude ---> Deg	Min	Sec
PBHL -Plan hit target			8062.00	-1180.62	-199.22	6972747.54	2251514.97	39	26	29.811 N	109	20	9.360 W

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
1000.00	1000.00	9.625	12.250	9 5/8"

Annotation

MD ft	TVD ft	
1100.00	1100.00	KOP
1689.25	1685.10	HOLD
6960.15	6844.90	DROP
7549.40	7430.00	HOLD
8180.40	8061.00	PBHL

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
4089.75	4035.00	CASTLEGATE		0.00	0.00
7332.19	7213.00	F3 ZONE		0.00	0.00
7549.40	7430.00	DAKOTA SILT		0.00	0.00
7585.40	7466.00	DAKOTA SAND		0.00	0.00
7707.40	7588.00	BASE DAKOTA		0.00	0.00

Weatherford International Ltd.
DIRECTIONAL PLAN REPORT

Weatherford

Company:	NATIONAL FUEL CORPORATION	**Date:** 5/19/2008 **Time:** 16:18:41	**Page:** 4
Field:	GRAND COUNTY, UTAH	**Co-ordinate(NE) Reference:**	Well: HORSE POINT STATE #13-1, True Nort
Site:	HORSE POINT STATE #13-1	**Vertical (TVD) Reference:**	SITE 7465.0
Well:	HORSE POINT STATE #13-1	**Section (VS) Reference:**	Well (0.00N,0.00E,189.58Azi)
Wellpath:	1	**Survey Calculation Method:**	*Minimum Curvature* **Db:** Sybase

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
7829.40	7710.00	LOWER LK2 SAND		0.00	0.00
7881.40	7762.00	MORRISON		0.00	0.00

UTAH STATE COVER PAGE
Must Accompany All Project Reports
Submitted to Utah SHPO

Project Name: **Class III cultural resources inventory for the proposed NFC Lindisfarne-State #43-35 and the Horse Point State #13-1 well locations in Grand and Uintah Counties, Utah, for National Fuel Corporation**

State Project. No. **U08-GB-0380s**

Report Date: **5/20/2008**

County(ies): **Grand and Uintah**

Principal Investigator: **Carl E. Conner**

Field Supervisor(s): **Carl E. Conner**

Records search completed at: **UDSH**

Record search date(s): **5/19/2008**

Acreage Surveyed ~ Intensive: **20 acres**

Recon/Intuitive: **0 acres**

7.5' Series USGS Map Reference(s): **PR Spring Quadrangle (1983)**

Sites Reported	**Count**	**Smithsonian Site Numbers**
Archaeological Sites Revisits (no inventory form update)	0	
Revisits (updated IMACS site inventory form attached)	0	
New recordings (IMACS site inventory form attached)	0	
Total Count of Archaeological Sites	0	
Historic Structures (USHS 106 site info form attached)		
Total National Register Eligible Sites	0	

----------Checklist of Required Items----------

1._X_Copy of the Final Report
2._X_Copy of 7.5' Series USGS Map with Surveyed/Excavated Area Clearly Identified.
3.___Completed IMACS Site Inventory Forms, Including
__Parts A and B or C, _The IMACS Encoding Form,
__Site Sketch Map, _Photographs
_Copy of the appropriate 7.5' Series USGS Map w/ the Site Location Clearly Marked and Labeled with the Smithsonian Site Number
4._X_Completed "Cover Sheet" Accompanying Final Report and Survey Materials (Please make certain all of your checked items are attached.)

Class III Cultural Resource Inventory Report
for the
Proposed NFC Lindisfarne-State #43-35 and
the Horse Point State #13-1
Well Locations on
State Lands in Grand and Uintah Counties, Utah
for
National Fuel Corporation

Declaration of Negative Findings

GRI Project No. 2838

20 May 2008

Prepared by

Grand River Institute
P.O. Box 3543
Grand Junction, Colorado 81502
UDSH Project Authorization No. U08-GB-0380s

Carl E. Conner, Principal Investigator

Submitted to

Preservation Office
Utah Division of State History
300 Rio Grande
Salt Lake City, Utah 84101

Abstract

Grand River Institute conducted a Class III cultural resources inventory for the proposed NFC Lindisfarne-State #43-35 and the Horse Point State #13-1 well locations in Grand and Uintah Counties, Utah, for National Fuel Corporation under Utah Division of State History (UDSH) Project Authorization No. U08-GB-0380s. This work was done to meet requirements of State law that protect cultural resources. A files search conducted through the Preservation Office UDSH on 19 May 2008 indicated no sites were previously recorded in the study area. Field work was performed on the same day. A total of 20 acres of State land was inspected. No cultural or paleontological resources were encountered and clearance is recommended.

TABLE OF CONTENTS

LIST OF FIGURES AND TABLES

Introduction

At the request of National Fuel Corporation, a Class III cultural resources inventory for the proposed NFC Lindisfarne-State #43-35 and the Horse Point State #13-1 well locations in Grand and Uintah Counties, Utah, for National Fuel Corporation under Utah Division of State History (UDSH) Project Authorization No. U08-GB-0380s. The files search, survey and report were prepared by Carl E. Conner (Principal Investigator). A files search conducted through the Preservation Office UDSH on 19 May 2008 indicated no sites were previously recorded within the study area. Field work was performed on 19 May 2008. A total of 20 acres of State land was inspected.

This survey was done to meet requirements of Utah Code, Title 9, Chapter 8. This law is concerned with the identification, evaluation, and protection of fragile, non-renewable evidences of human activity, occupation and endeavor reflected in districts, sites, structures, artifacts, objects, ruins, works of art, architecture, and natural features that were of importance in human events. Such resources tend to be localized and highly sensitive to disturbance.

Location of Project Area

The study area lies on the Roan Plateau in Grand and Uintah Counties, Utah. The NFC Lindisfarne State #43-35 is located in T. 15 S., R. 23 E. Secs. 35 and 36, and the Horse Point State #13-1 is located in T. 16 S., R. 23 E. Sec. 1; SLBM (Figure1).

Environment

The project area is within the major geologic subdivision of the Colorado Plateau known as the Uinta Basin Section. In Utah, this section extends from the Uinta Mountains on the north to the Book Cliffs on the south. It is a broad downwarp into which Quaternary- and Tertiary-age deposits were made from the surrounding mountains which include Holocene and Pleistocene pediment deposits, and Eocene-age fluvial and lacustrine sedimentary rocks (Rigby 1976:xi). Physiographically, the basin includes the Uinta basin in the northern portion and the Book Cliffs/Roan Plateau in the south portion. The study area occurs in the latter and the Wasatch Formation forms the bedrock. Rocky, sandy loams formed in residuum cover the bedrock on the ridgetop.

Elevations in the project area ranges from 7400 to 8200 feet. The terrain is a narrow ridgetop covered in Transitional Zone oakbrush, sagebrush, serviceberry and grasses, with an occasional juniper or pinyon for the #43-35 and a narrow canyon bottom for the #13-1 that has sagebrush, grasses and aspen. Regional faunal inhabitants include deer, antelope, elk, black bear, coyote, mountain lion, cottontails, jack rabbits, and various raptores. A cool, mid-latitude steppe climate prevails. Annual precipitation of this elevation

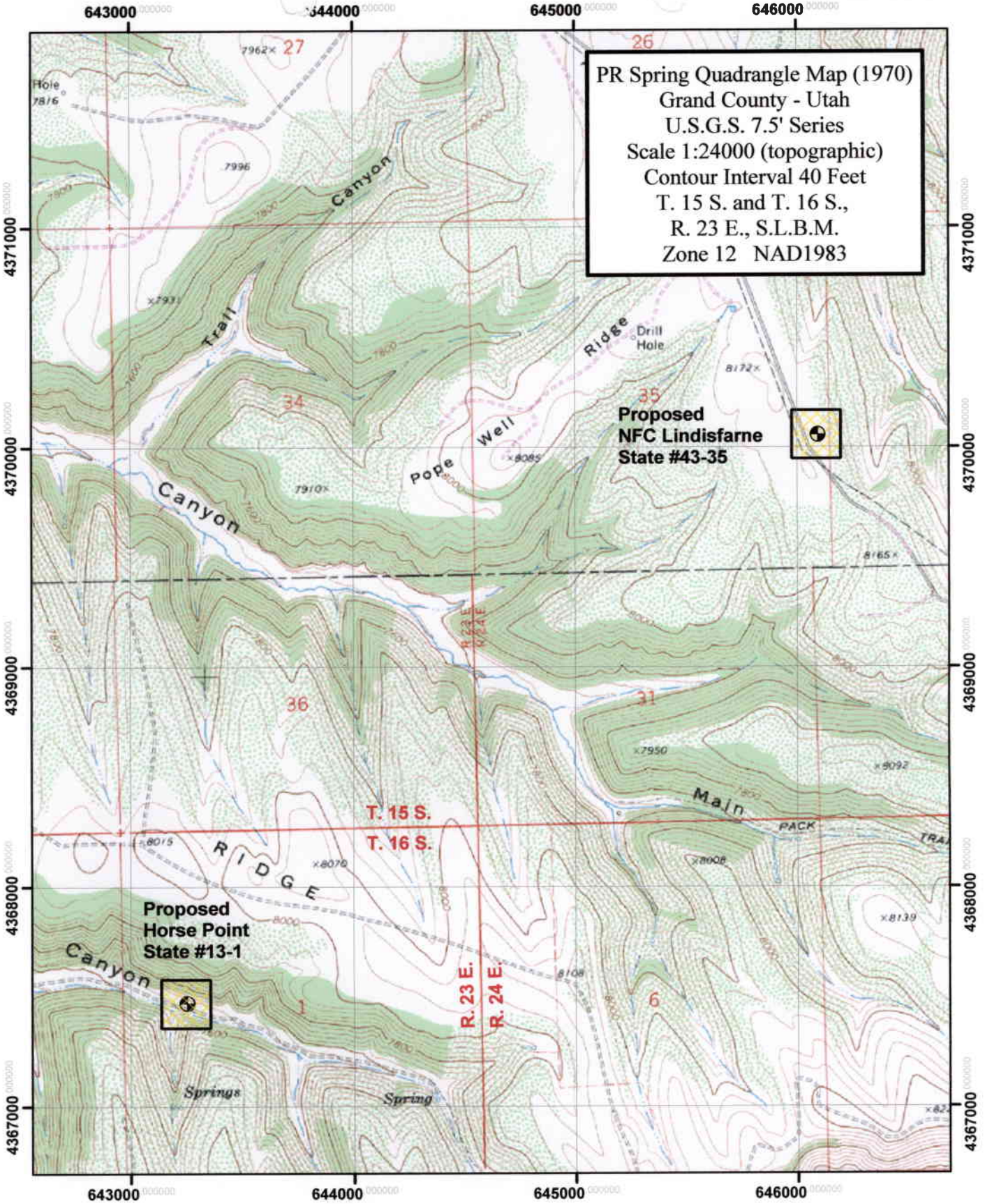


Figure 1. Project location map for the Class III cultural resources inventory report for the proposed NFC Lindisfarne-State and the Horse Point State #13-1 well locations in Grand and Uintah Counties, Utah, for National Fuels Corporation. Areas surveyed are highlighted. [GRI Project No. 2838, 5/20/08]

range is between 14 and 18 inches. Temperatures can reach 95°F in mid-summer and -20°F in January. Paleoenvironmental data are scant, but it is generally agreed that gross climatic conditions have remained fairly constant over the last 12,000 years. However, changes in effective moisture, and cooling-warming trends probably affected the prehistoric occupation of the region.

Files Search

Regional archaeological studies suggest nearly continuous human occupation of northeastern Utah for the past 12,000 years. Evidence of the Paleoindian Tradition, the Archaic Tradition, Fremont Culture, and Protohistoric/Historic Utes has been found. Historic records suggest occupation or use by EuroAmerican trappers, settlers, miners, and ranchers as well. Overviews of the prehistory and history of the region are provided in the *Utah BLM Cultural Resource Series No. 5*, Sample Inventories of Oil and Gas Fields in Eastern Utah (Nickens and Larralde 1980); and, in the *BLM Grand Resource Area Class I Cultural Resource Inventory* (Horn et al. 1994).

A files search conducted through the Preservation Office UDSH on 19 May 2008 indicated no sites were previously recorded in the study area. Twelve energy or road upgrade related projects have been conducted within a mile of the NFC Lindisfarne-State #43-35 study area (Table 1), and four such projects have been conducted within a mile of the Horse Point State #13-1 study area (Table 2). Two sites (42UN560 and 42UN900) have been recorded within a mile--but well outside--of the present project boundaries.

Table 1. List of previous cultural resource surveys within one mile of the proposed NFC Lindisfarne-State #43-35 study area.

Report Number	Project
U-07-GB-1249s	Class III cultural resources inventory for the proposed NFC Lindisfarne-State #13-35 and NFC Lindisfarne-State #43-35 well locations and related new and to-be-upgraded access routes in Uintah County, Utah for National Fuel Corporation (Conner, 10/2007)
U-06-ST-1546bps	Class III CRI of the Seep Ridge Pipeline Project, Grand and Uintah Counties, Utah (Reed and Hays, 12/2006)
U-05-ST-1038bps	Class III CRI of the Park Ridge 3-D Geophysical Exploration Project Area, Uintah County, Utah (Hays et al., 6/2006)
U-04-AY-292s	EOGF Resources Inc. Lindisfarne #1-26: A Cultural Resource Inventory for a well and its access and pipeline, Uintah County, Utah (Truesdale, 4/2004)

Report Number	Project
U-02-NU-0340bs	Class III Cultural Resource Inventory on the WesternGeco Horse Point 3D Seismic Grid, Uintah and Grand Counties, Utah (Frizell et al., 9/18/2002)
U-95-GB-457ps	Cultural Resource Inventory Report of the Proposed Spring Diversion Project in Uintah and Grand Counties, Utah for Alameda Corporation (Conner, 8/1995)
U-91-AF-301 U-90-AF-133bis U-89-AF-687bps	Archaeological Evaluations in the Northern Colorado Plateau Cultural Area: An Investigation of the Seep Ridge - Book Cliffs - Red Wash - Hay Canyon - Whetrock Canyon & Interstate 70 - Exit 220 Alternative Highway Routes in Uintah and Grand Counties, Utah (Hauck, Ph.D., 12/1991)
U-85-MM-431s	PR Springs Tar Sands Exploration Project (24 drill holes) for Mobile Alternative Energy, Inc. in Grand and Uintah Counties, Utah (Metcalf, 6/25/1985)
U-84-MA-763bs	Cultural resource inventory for 39 proposed drill holes for Mobil Oil Corporation's PR Spring Tar Sands Exploration Permit Area in Uintah and Grand Counties, Utah (Metcalf-Zier, 9/1983)
U-83-MA-196bs	Cultural resource inventory of 16 proposed drill holes for Mobil Oil Corporation's PR Spring Tar Sands Exploration Project, Uintah and Grand Counties, Utah (Metcalf-Zier, 9/1983)
U-80-WE-304b	A cultural resource survey of pipeline right-of-ways in the Main Canyon District of the East Tavaputs Plateau, Utah (Hibbets and Wharton, 6/1980
U-79-DB-147b	An Archaeological Survey of Gas Pipelines in Northwestern Colorado and East Central Utah for Northwest Pipeline Corporation (Powers et al., 6/1979)

Table 2. List of previous cultural resource surveys within one mile of the proposed Horse Point State #13-1 study area.

Report Number	Project
U-02-NU-0340bs	Class III Cultural Resource Inventory on the WesternGeco Horse Point 3D Seismic Grid, Uintah and Grand Counties, Utah (Frizell et al., 9/18/2002)

Report Number	Project
U-85-MM-431s	PR Springs Tar Sands Exploration Project (24 drill holes) for Mobile Alternative Energy, Inc. in Grand and Uintah Counties, Utah (Metcalf, 6/25/1985)
U-84-GC-751bs	Archaeological Survey for Northwest Pipeline Corporation's Tie to TXO to Little Berry State #1 in Grand County, Utah (Hartley, 6/12/1984)
U-84-MA-763bs	Cultural resource inventory for 39 proposed drill holes for Mobil Oil Corporation's PR Spring Tar Sands Exploration Permit Area in Uintah and Grand Counties, Utah (Metcalf-Zier, 9/1983)

Study Objectives

The purpose of the study was to identify and record all cultural resources within the area of potential impact and to assess their significance and eligibility to the National Register of Historic Places (NRHP). Paleontological resources were also considered in the inspection. However, a final evaluation of those resources must be provided by a paleontologist permitted by the State of Utah.

Field Methods

A Class III, 100% pedestrian, cultural resources survey of the proposed well locations was made by a two-person crew walking a series of N-S and E-W transects spaced at 15-meter intervals to cover the 10-acre study areas. A total of about 20 acres of State land was intensively surveyed.

Cultural resources were sought as surface exposures and were characterized as sites or isolated finds. Sites were defined as discrete loci of patterned activity greater than 50 years of age and consisting of 5 or more prehistoric artifacts with or without features or over 50 historic artifacts with associated features. Also, a single isolated hearth with no other associated artifacts or features was to be recorded as a site. Isolated finds were defined as less than 5 artifacts without associated features; historic trash dumps without associated features; single core reduction events with a single core and associated reduction debitage; single pot drops where the sherds are from a single vessel; or prospector pits with/or without artifacts and no associated historic structures or features.

Environmental constraints which might be expected included previous natural ground disturbance that has modified the surface so extensively that the likelihood of finding

cultural resources is negligible; human activity within the past 50 years that has created a new land surface such that all traces of cultural resources have been eradicated; natural environmental characteristics that are unfavorable to the presence of historic properties; slopes greater than 30% where no potential for rock shelter, rock art, or other cultural properties associated with rock faces or ledges exist; and areas with 100% vegetation coverage.

All cultural resources that qualified as sites (such as prehistoric open camps, lithic scatters, occupied overhangs, rockshelters, and evidence of historic occupation) or isolated finds were to be recorded as they were encountered to standards set by the Utah Division of State History. Recording of the cultural manifestations during this project was to be completed using the following methods of mapping and note taking. The basic approach to the data collection was to be the continuous mapping of observed artifacts by recording UTM coordinates (NAD 83 Datum) using a Trimble Geo XT. Then, the site map was to be created using corrected GPS data and ARCMAP. Photographs were to be taken at the sites and include general views and specific artifacts.

No sites were recorded. No temporally diagnostic artifacts were observed, and no artifacts were collected. Field notes for this project are on file at Grand River Institute.

Study Findings and Management Recommendations

As expected, no cultural or paleontological resources were encountered during the survey. Accordingly, cultural resource clearance is recommended.

References

Horn, J., Alan Reed, and Susan Chandler
1994 Grand Resource Area Class I Cultural Resource Inventory. Ms on file Bureau of Land Management Grand Field Office, Moab.

Nickens, Paul R. and Signa L. Larralde
1980 Sample Inventories of Oil and Gas Fields in Eastern Utah. Utah BLM Cultural Resource Series No. 5. Bureau of Land Management, Salt Lake City.

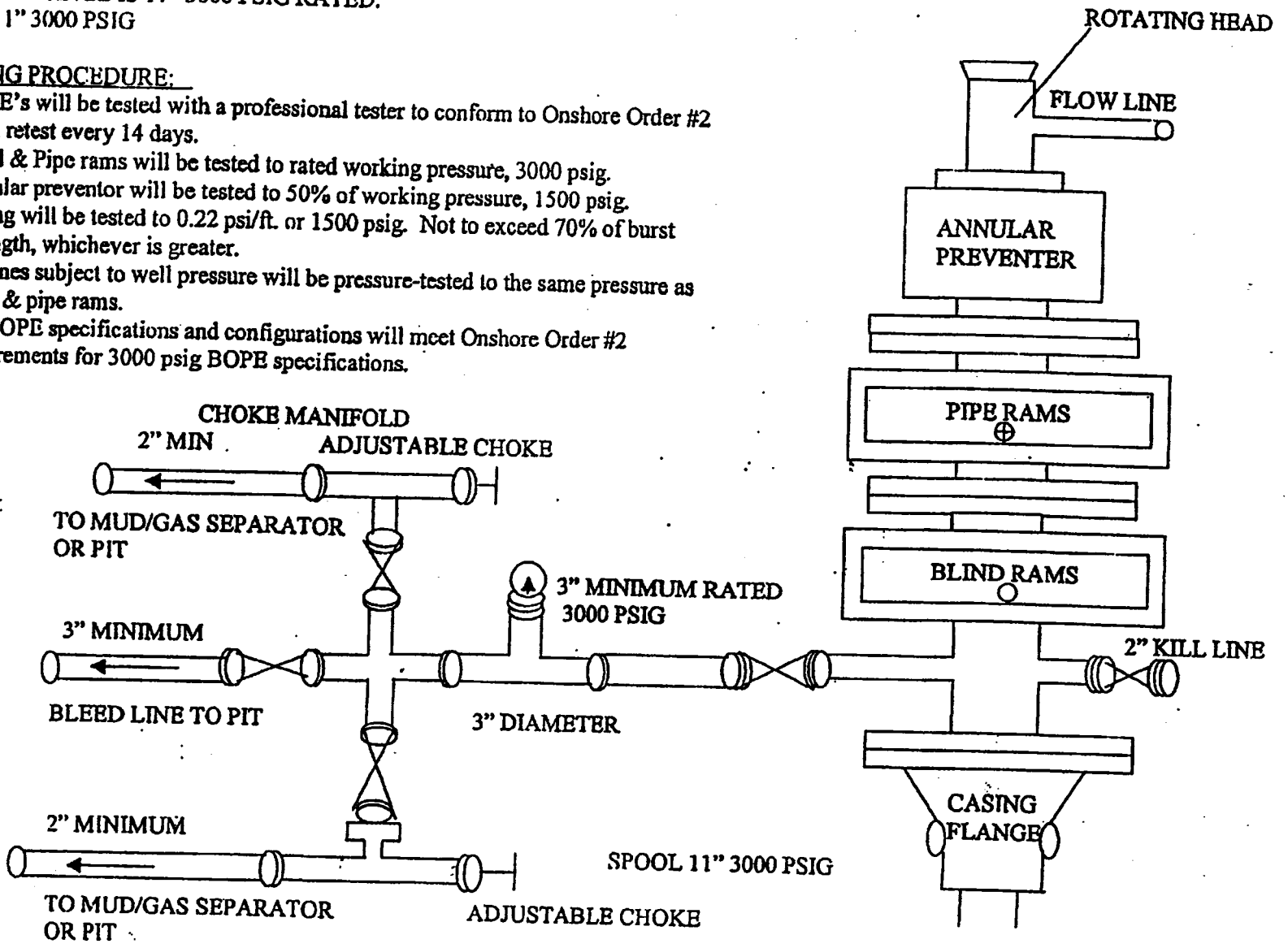
Rigby, J. Keith
1976 Northern Colorado Plateau. Kendall/Hunt Publishing Company. Dubuque.

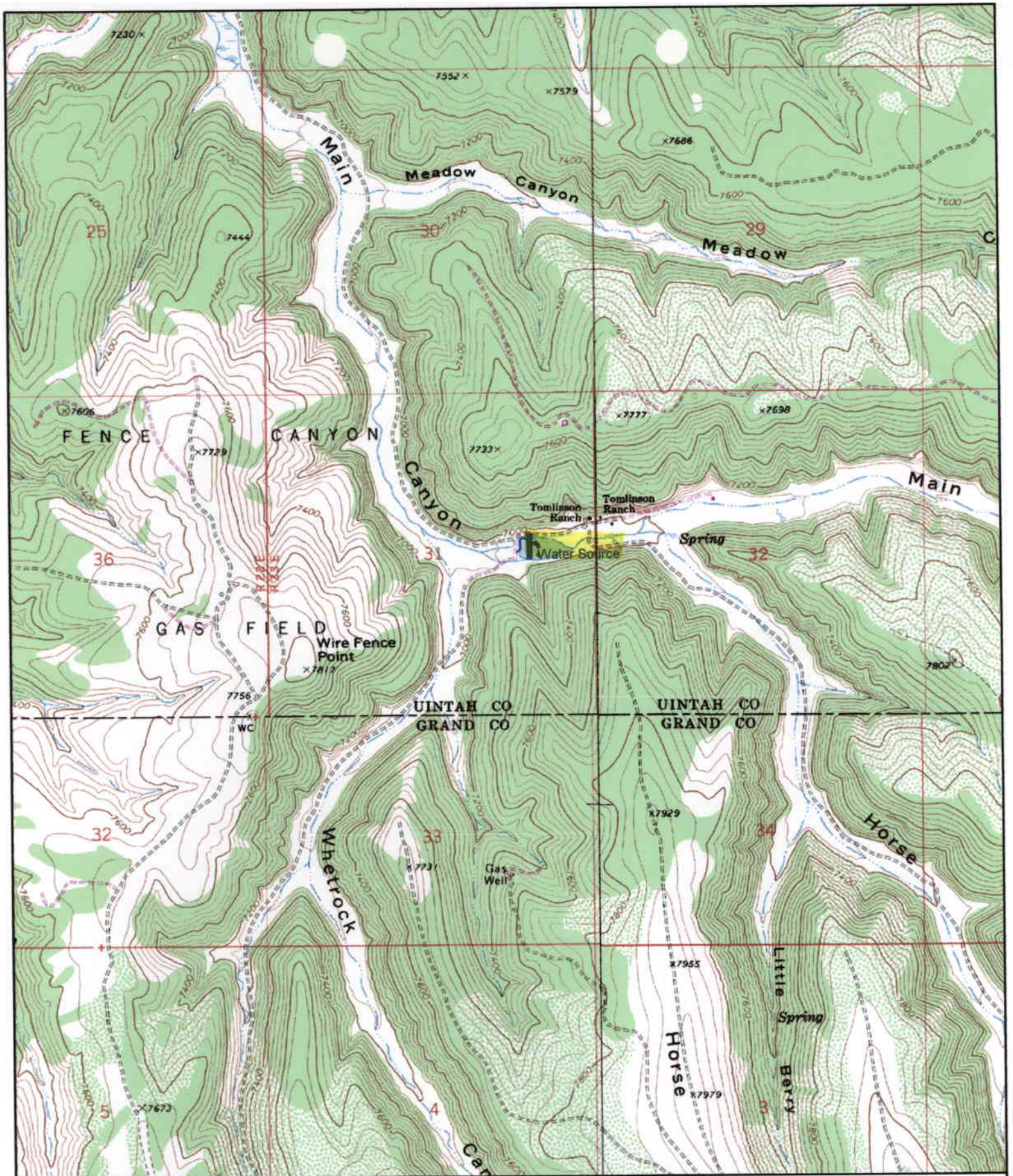
3000 PSIG DIAGRAM

ANNULAR PREVENTOR AND BOTH RAMS ARE 3000 PSIG RATED.
CASING FLANGE IS 11" 3000 PSIG RATED.
BOPE 11" 3000 PSIG

TESTING PROCEDURE:

1. BOPE's will be tested with a professional tester to conform to Onshore Order #2 with retest every 14 days.
2. Blind & Pipe rams will be tested to rated working pressure, 3000 psig.
3. Annular preventor will be tested to 50% of working pressure, 1500 psig.
4. Casing will be tested to 0.22 psi/ft. or 1500 psig. Not to exceed 70% of burst strength, whichever is greater.
5. All lines subject to well pressure will be pressure-tested to the same pressure as blind & pipe rams.
6. All BOPE specifications and configurations will meet Onshore Order #2 requirements for 3000 psig BOPE specifications.





Name: CEDAR CAMP CANYON
Date: 1/29/2008
Scale: 1 inch equals 2000 feet

Location: 039° 28' 04.2" N 109° 22' 48.4" W
Caption: Water Source

NATIONAL FUEL CORPORATION

HORSE POINT STATE #13-1

LOCATED IN GRAND COUNTY, UTAH
SECTION 1, T16S, R23E, S.L.B.&M.

PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE **CAMERA ANGLE: SOUTHERLY**

PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS **CAMERA ANGLE: NORTHWESTERLY**

- Since 1964 -
Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
435-789-1017 uels@uelsinc.com

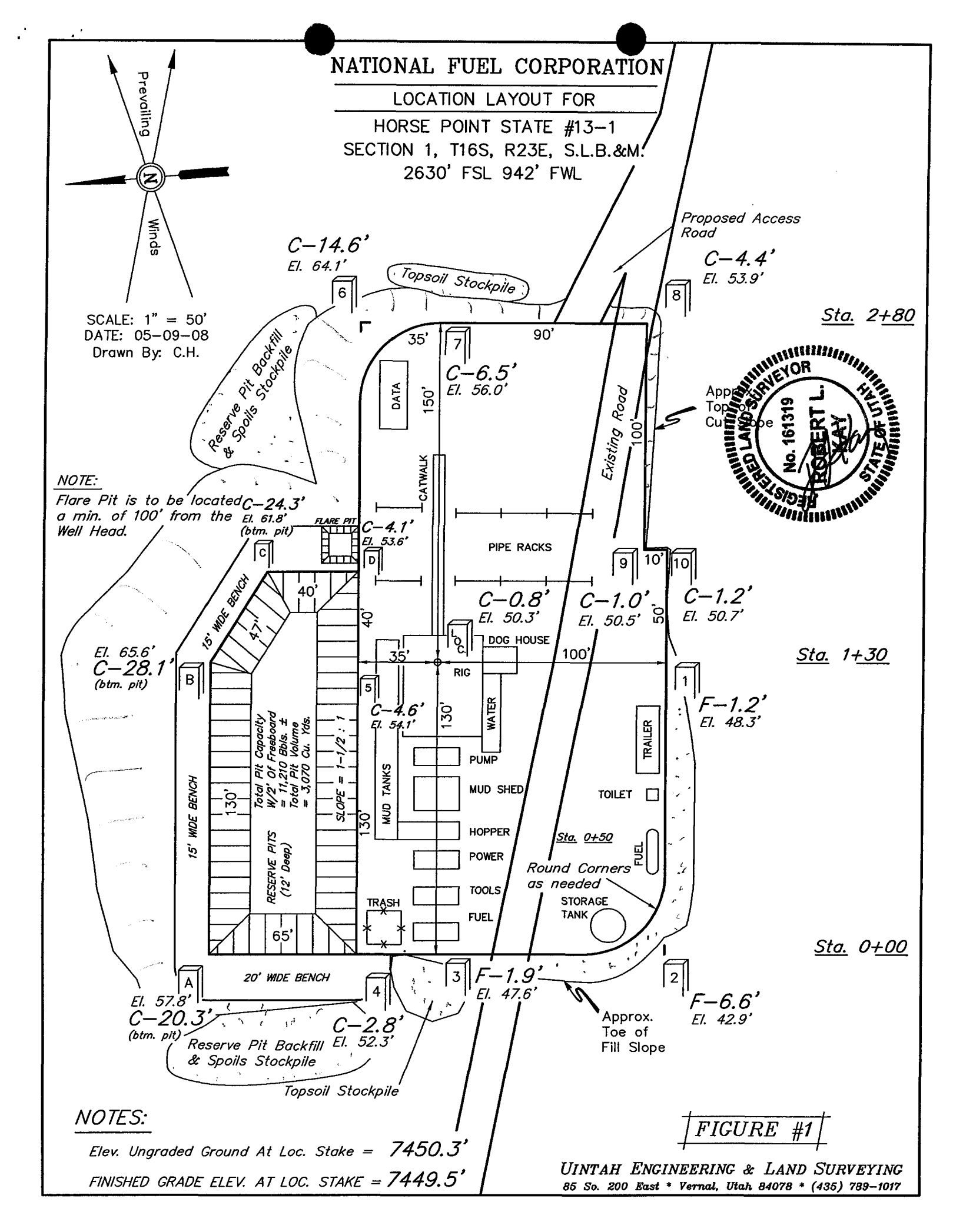
LOCATION PHOTOS	05 MONTH	12 DAY	08 YEAR	PHOTO
TAKEN BY: J.R.	DRAWN BY: C.P.	REVISED: 00-00-00		

NATIONAL FUEL CORPORATION

LOCATION LAYOUT FOR

HORSE POINT STATE #13-1
SECTION 1, T16S, R23E, S.L.B.&M.
2630' FSL 942' FWL

SCALE: 1" = 50'
DATE: 05-09-08
Drawn By: C.H.



REGISTERED LAND SURVEYOR
No. 161319
ROBERT L. KAY
STATE OF UTAH

NOTES:

Elev. Ungraded Ground At Loc. Stake = 7450.3'

FINISHED GRADE ELEV. AT LOC. STAKE = 7449.5'

FIGURE #1

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

NATIONAL FUEL CORPORATION

FIGURE #2

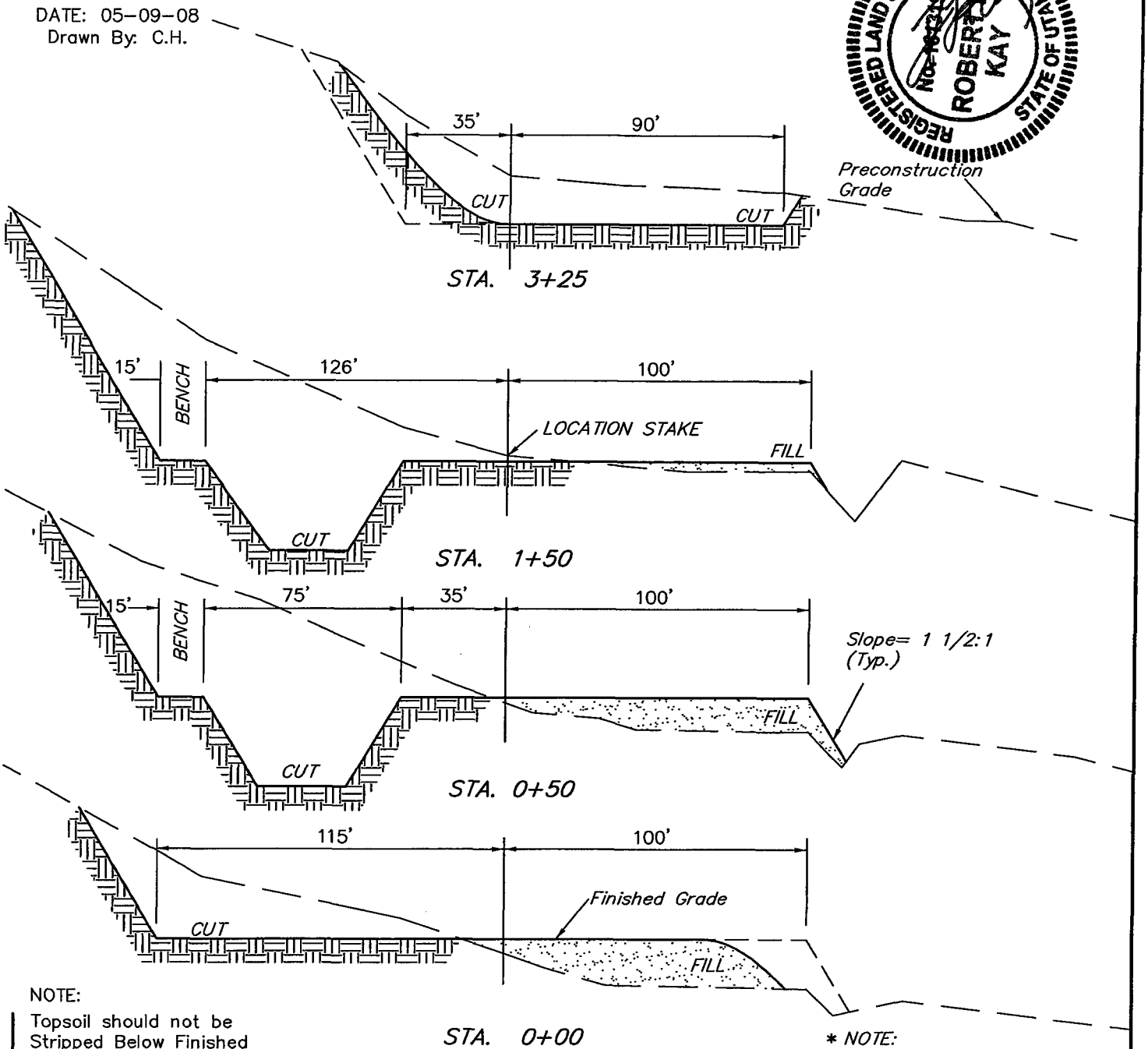
TYPICAL CROSS SECTIONS FOR

HORSE POINT STATE #13-1
SECTION 1, T16S, R23E, S.L.B.&M.
2630' FSL 942' FWL

1" = 20'
X-Section Scale
1" = 50'

DATE: 05-09-08
Drawn By: C.H.

REGISTERED LAND SURVEYOR
No. 161319
ROBERT KAY
STATE OF UTAH



NOTE:
Topsoil should not be Stripped Below Finished Grade on Substructure Area.

* NOTE:
FILL QUANTITY INCLUDES 5% FOR COMPACTION

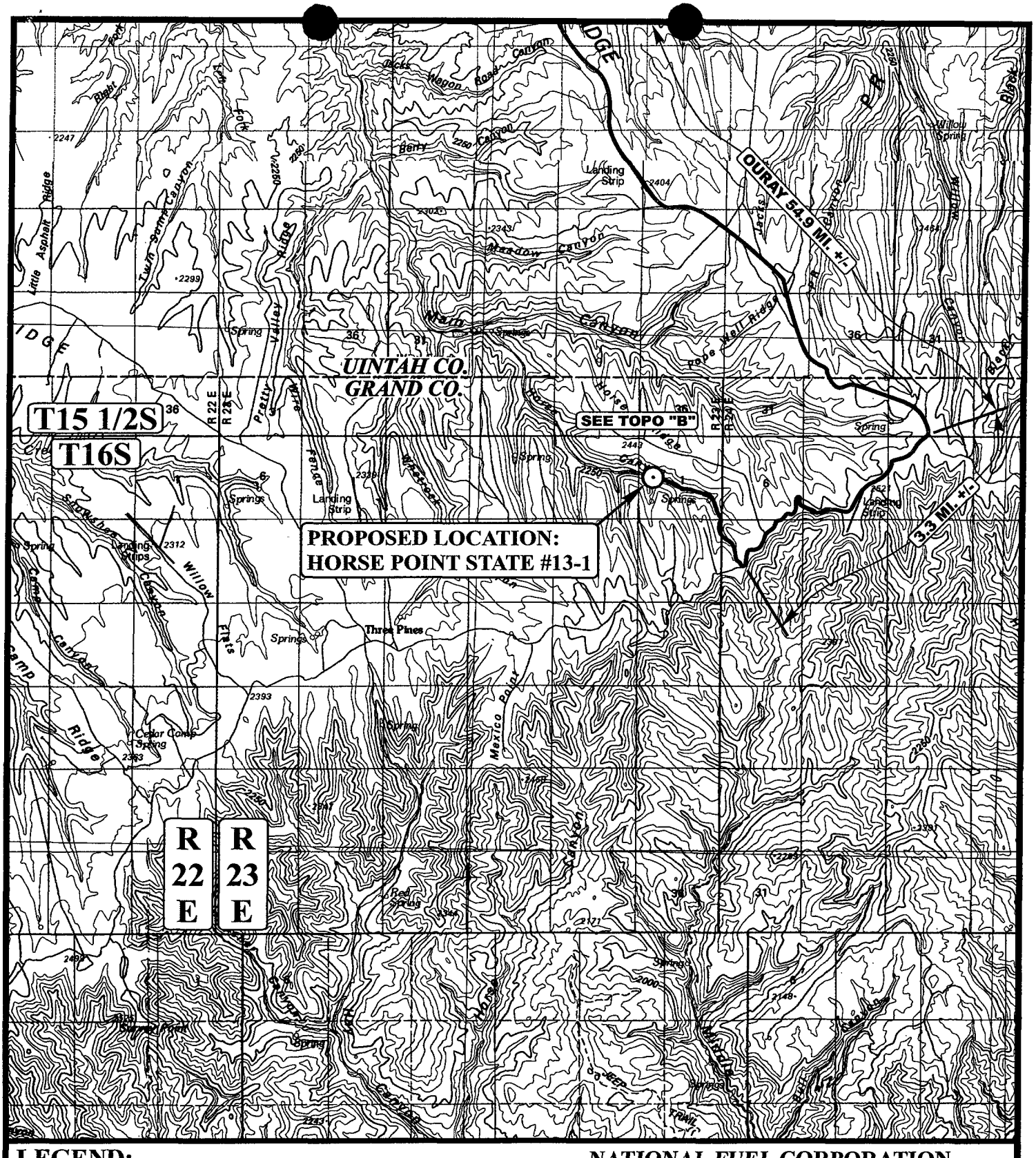
APPROXIMATE YARDAGES

CUT

(6") Topsoil Stripping	=	1,370 Cu. Yds.
Remaining Location	=	14,460 Cu. Yds.
TOTAL CUT	=	15,830 CU.YDS.
FILL	=	2,140 CU.YDS.

EXCESS MATERIAL	=	13,690 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	=	2,910 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	=	10,780 Cu. Yds.

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017



LEGEND:

⊙ PROPOSED LOCATION

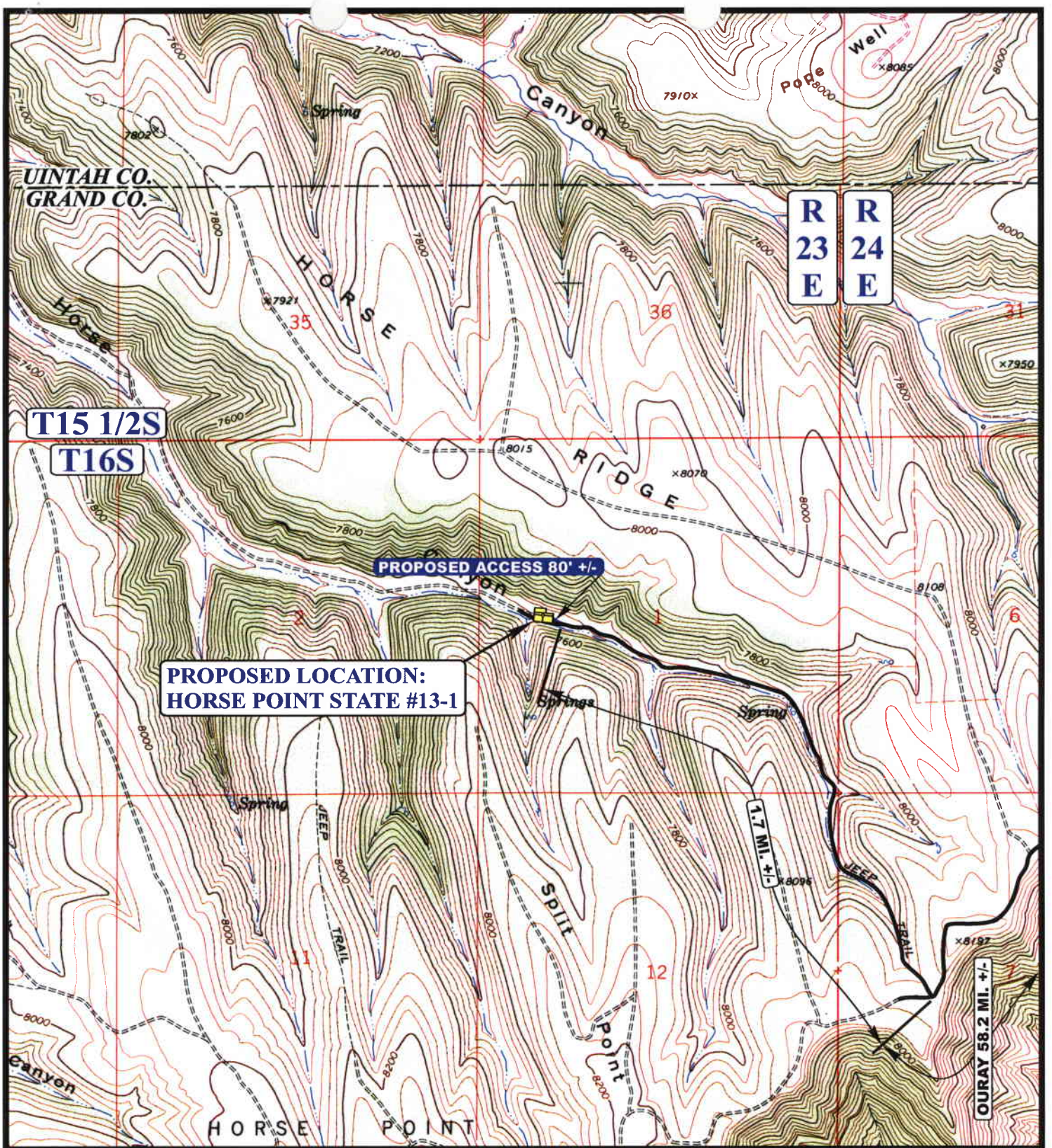
N

NATIONAL FUEL CORPORATION

HORSE POINT STATE #13-1
SECTION 1, T16S, R23E, S.L.B.&M.
2630' FSL 942' FWL

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	05 MONTH	12 DAY	08 YEAR	A TOPO
SCALE: 1:100,000	DRAWN BY: C.P.	REVISED: 00-00-00		



LEGEND:

EXISTING ROAD

PROPOSED ACCESS ROAD

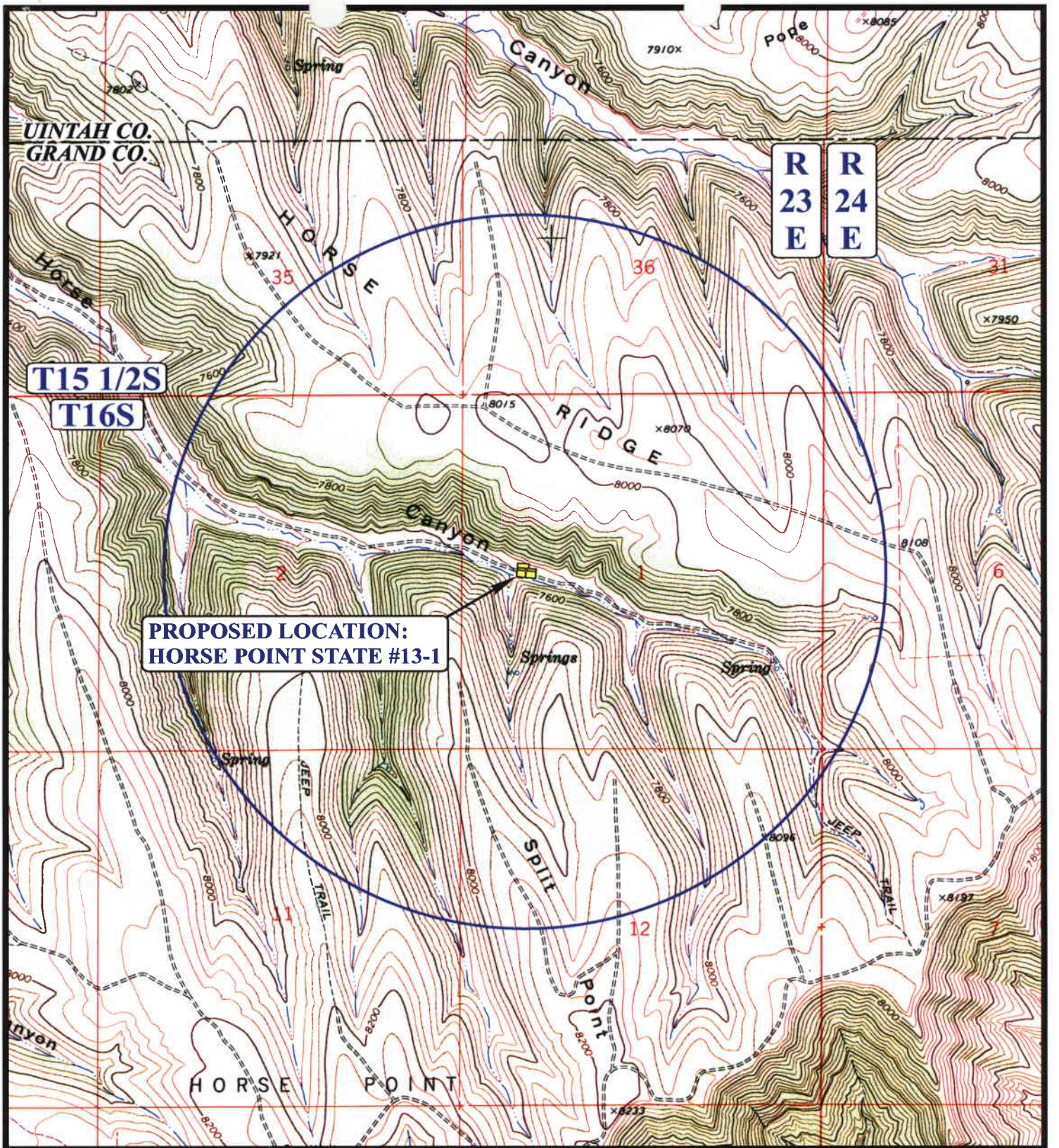
N

NATIONAL FUEL CORPORATION

HORSE POINT STATE #13-1
SECTION 1, T16S, R23E, S.L.B.&M.
2630' FSL 942' FWL

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	05 MONTH	12 DAY	08 YEAR	B TOPO
SCALE: 1" = 2000'	DRAWN BY: C.P.	REVISED: 00-00-00		



LEGEND:

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED

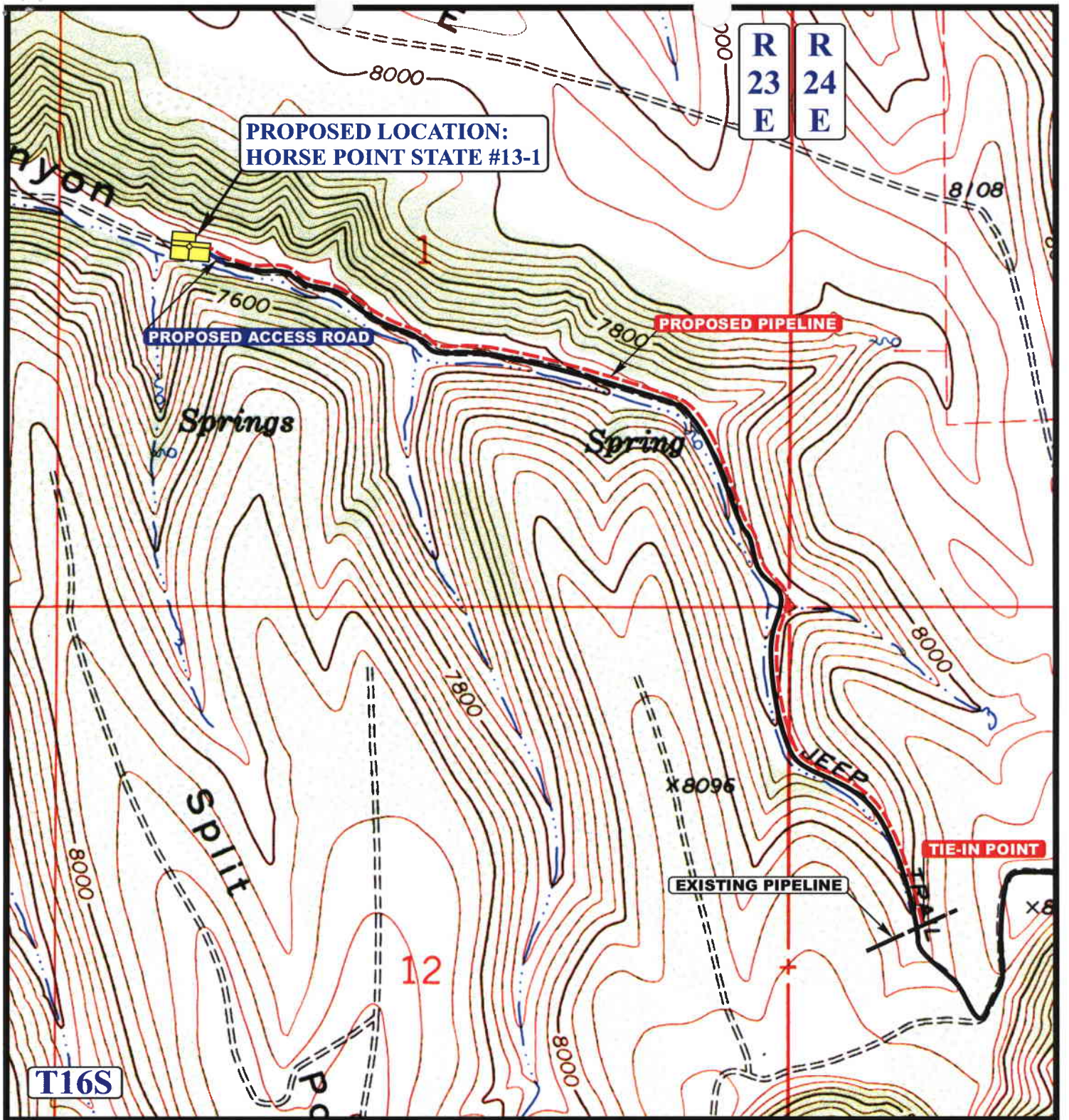
N

NATIONAL FUEL CORPORATION

HORSE POINT STATE #13-1
SECTION 1, T16S, R23E, S.L.B.&M.
2630' FSL 942' FWL

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	05 MONTH	12 DAY	08 YEAR
SCALE: 1" = 2000'	DRAWN BY: C.P.	REVISED: 00-00-00	C TOPO



APPROXIMATE TOTAL PIPELINE DISTANCE = 8,140' +/-

LEGEND:

PROPOSED ACCESS ROAD
EXISTING PIPELINE
PROPOSED PIPELINE

N

NATIONAL FUEL CORPORATION

HORSE POINT STATE #13-1
SECTION 1, T16S, R23E, S.L.B.&M.
2630' FSL 942' FWL

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP | 05 MONTH | 12 DAY | 08 YEAR | D TOPO

SCALE: 1" = 1000' | DRAWN BY: C.P. | REVISED: 00-00-00

WORKSHEET

APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 05/21/2008

API NO. ASSIGNED: 43-019-31579

WELL NAME: HORSE POINT ST 13-1

OPERATOR: NATIONAL FUEL (N8060)

PHONE NUMBER: 303-220-7772

CONTACT: ANDREW BUSCH

PROPOSED LOCATION:

SWNW 01 160S 230E

SURFACE: 2630 FSL 0942 FWL

BOTTOM: 1450 FSL 0740 FWL

COUNTY: GRAND

LATITUDE: 39.44479 LONGITUDE: -109.3345

UTM SURF EASTINGS: 643317 NORTHINGS: 4367252

FIELD NAME: UNDESIGNATED (2)

INSPECT LOCATN BY: / /		
Tech Review	**Initials**	**Date**
Engineering	DKD	5/30/08
Geology		
Surface		

LEASE TYPE: 3 - State

LEASE NUMBER: ML-48045

SURFACE OWNER: 3 - State

PROPOSED FORMATION: MRSN

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

✓ Plat

✓ Bond: Fed[] Ind[] Sta[] Fee[]
(No. LPM8756586)

N Potash (Y/N)

N Oil Shale 190-5 (B) or 190-3 or 190-13

✓ Water Permit
(No. 49-123)

N RDCC Review (Y/N)
(Date:)

N/A Fee Surf Agreement (Y/N)

N/A Intent to Commingle (Y/N)

LOCATION AND SITING:

___ R649-2-3.

Unit: ___

___ R649-3-2. General
Siting: 460 From Qtr/Qtr & 920' Between Wells

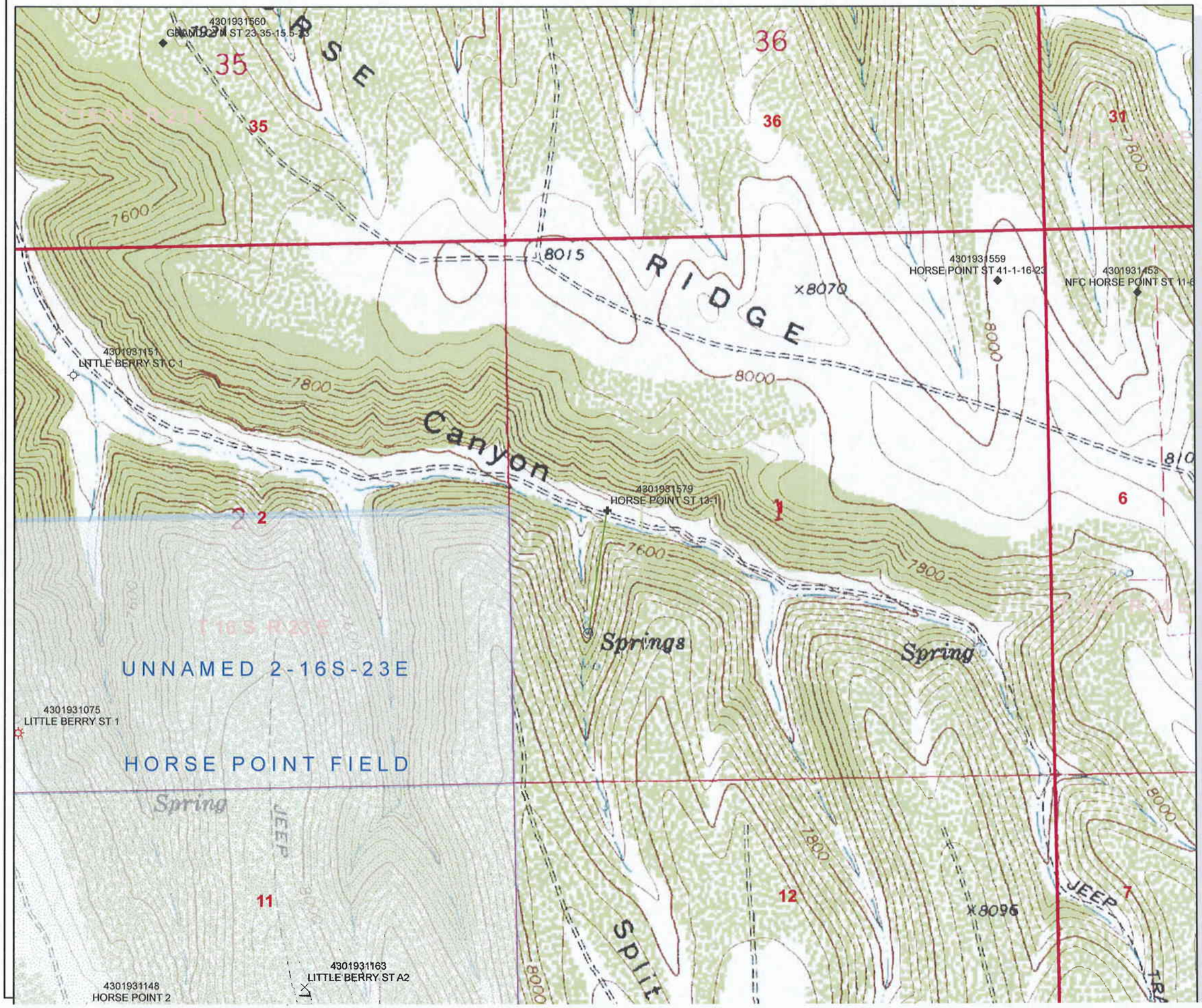
___ R649-3-3. Exception

✓ Drilling Unit
Board Cause No: 138-1
Eff Date: 8-13-1969
Siting: 460' fr u bdrys & 920' fr other wells.

✓ R649-3-11. Directional Drill

COMMENTS: Needs Presite (05-29-08)

STIPULATIONS: 1- Surface Casing Cement stip
2- Cmt Stip #3 (4½" production, 1000' MD)
3- STATEMENT OF BASIS



API Number: 4301931579

Well Name: HORSE POINT ST 13-1

Township 16.0 S Range 23.0 E Section 01

Meridian: SLBM

Operator: NATIONAL FUEL CORPORATION

Map Prepared: 5/27/2008
Map Produced by Diana Mason

Units

STATUS
- ACTIVE
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

Fields

STATUS
- Unknown
- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- STORAGE
- TERMINATED

- Sections
- Township
- Enhanced Recovery

Wells Query

- <all other values>

GIS_STAT_TYPE
- <Null>
- APD
- DRL
- GI
- GS
- LA
- NEW
- OPS
- PA
- PGW
- POW
- RET
- SGW
- SOW
- TA
- TW
- WD
- WI
- WS
- Bottom Hole Location

1,250 625 0 1,250 Feet

1:12,000
NAD 1927 UTM Zone 12N

Application for Permit to Drill
Statement of Basis

APD No	API WellNo	Status	Well Type	Surf Ownr	CBM
771	43-019-31579-00-00		GW	S	No

Operator NATIONAL FUEL CORPORATION **Surface Owner-APD**
Well Name HORSE POINT ST 13-1 **Unit**
Field UNDESIGNATED **Type of Work**
Location SWNW 1 16S 23E S 2630 FSL 942 FWL GPS Coord (UTM) 643317E 4367252N

Geologic Statement of Basis

NFC proposes to set 60' of conductor pipe and 1,000' of surface casing at this location. The base of the moderately saline water is at approximately 2,700 feet in this area. This location lies on the Green River Formation/Wasatch Formation transition. The proposed location is in a recharge area for the aquifers of the upper Green River and Wasatch and fresh water can be expected to be found in these zones. A search of Division of Water Rights records indicates no water wells within a 10,000 foot radius of the proposed location. The production string cement should be brought up above the base of the moderately saline water to prevent it from mixing with fresher waters up hole.

Brad Hill — **APD Evaluator**
6/9/2008 — **Date / Time**

Surface Statement of Basis

The general location is in the Book Cliff Mountains or Roan Plateau of northern Grand County, Utah. Vernal Utah is approximately 75 air miles to the north and Ouray, Utah 60 road miles to the north. Access to the area from Ouray, Utah is following the Seep Ridge Uintah County road and the Book Cliffs Divide Grand County and oil field development roads. No new road will be required to reach the location.. Topography in the general area is broad flat or rounded ridges generally sloping in a north or westerly direction. Ridges are intersected with draws or deep canyons. Canyon walls may become excessively steep and rimmed with exposed sandstone bedrock out crops or ledges. Main Canyon is the major drainage in the area and runs in a westerly direction into Willow Creek. The Green River formation is the surface formation. Occasional seeps or springs occur in the numerous side drainages with the only flowing stream occurring below the springs where Horse Canyon and Main Canyon join. An occasional constructed pond to collect surface runoff for livestock and game watering exists.

The Horse Point State #13-1 well is a directional well proposed in the bottom of Horse Canyon. Both the minerals and surface are owned by SITLA. The bottom of Horse canyon is relatively narrow and has limited areas wide enough to facilitate well locations. At the selected site the canyon runs in a general east to west direction. Here the canyon has a narrow flattened bench that is occupied by the existing road. The reserve pit is planned in an cut on the north side of the canyon and is limited in extent by rounded vertical sandstone outcrops, which form cliffs that extend upward about 60 feet. The colluvial deposit of the side slope under the outcrops will be cut from 10 to 18 feet to form a 15' wide bench around the outside of the reserve pit. The pit will be excavated an additional 12 feet deep. The pit as planned is narrow and will be rounded on the east end to facilitate the rock outcrops in this area. On the up-drainage area between corners 6 and 7 the pad will be rounded to avoid excessive cut, however the cut at corner 6 will still be 15 feet. An existing quality road accesses the location from the east and will be ramped down as it enters the location. This is an oilfield development road not controlled by Grand County. Excavated materials from the upper-side of the location will be moved toward the southwest corner as fill. Here the fill is approximately 7 feet deep. A 10-foot jog is planned along the southeast side of the pad to avoid an incised ephemeral drainage located next to and paralleling the south slope of the canyon. As planned, the fill along the south side will not reach this draw. The center of the location is within a cut but part of the rig structure to the southwest may be on fill. Adequate compaction in the sandy soils or other means to assure rig sub-structure support must be provided here. Excess

fill will exist following pad construction and reserve pit closure. Placement areas for these spoils are planned on both the north-west and north-east sides of the pad. The site is covered with large sagebrush. Mr. Jim Davis representing SITLA requested that vegetation from the location not be mixed with and piled separate from the topsoil. Mr. Davis also stated that from his standpoint he would recommend that SITLA not approve the location. He felt the canyon bottom was too tight and that access to an alternative location accessing it on top of the ridge would be less impact. These concerns were discussed with Mr. Andrew Busch representing the proponent. Mr. Bush stated they have investigated a location on top of the ridge, which will require significant new road construction. This location was rejected because of the difficulty in obtaining a BLM rights-of-way, the amount of new disturbance that would be required for the road and the distance it was from their targeted down hole location as selected from their seismic data. Because of these concerns they investigated and surveyed the proposed location recognizing it also had limitations. Mr. Busch reiterated that the company's mineral lease with SITLA would expire June 30, 2008. It was important to the company to develop this well and operate it in conjunction with an existing well farther down this same drainage. I stated that based on the development plan as proposed and my on-site observations, I would recommend the site be utilized. Mr. Ben Williams representing the Utah Division of Wildlife Resources stated the area is within crucial elk calving and deer fawning habitat but because it was on an existing road he recommended no restricting stipulations for these species. Additional he stated the impact from constructing a new road down the ridge to the south and drilling and operating a well in this area would have significant impact on these two species. Mr. Williams gave Mr. Davis and Mr. Busch copies of his wildlife evaluation and a UDWR recommended seed mix to be used when re-vegetating the disturbed areas.

There are no seeps, springs or streams in the immediate area. A spring developed for livestock watering exist next to the road approximately 1 mile up Horse Canyon. Other small springs and seeps are likely to occur in side canyons in the general area. No drainages will be interrupted by the proposed construction and no diversions are needed.

No stability problems are expected to occur with the location as proposed. Although the area is limited in space, the selected location appears to be a suitable site for constructing a pad and operating a well.

(Lavonne Garrison (SITLA) called 06/05/08 and stated that SITLA and National Fuels had searched for a better location. No better location was found and SITLA had determined that they would approve this location-BH 06/09/08)

Floyd Bartlett	5/29/2008
Onsite Evaluator	**Date / Time**

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be properly installed and maintained in the reserve pit.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator NATIONAL FUEL CORPORATION
Well Name HORSE POINT ST 13-1
API Number 43-019-31579-0 **APD No** 771 **Field/Unit** UNDESIGNATED
Location: 1/4,1/4 SWNW **Sec** 1 **Tw** 16S **Rng** 23E 2630 FSL 942 FWL
GPS Coord (UTM) 643204 4369020 **Surface Owner**

Participants

Floyd Bartlett (DOGM), Jim Davis (SITLA), Ben Williams (UDWR), Andrew Busch (National Fuels).

Regional/Local Setting & Topography

The general location is in the Book Cliff Mountains or Roan Plateau of northern Grand County, Utah. Vernal Utah is approximately 75 air miles to the north and Ouray, Utah 60 road miles to the north. Access to the area from Ouray, Utah is following the Seep Ridge Uintah County road and the Book Cliffs Divide Grand County and oil field development roads. No new road will be required to reach the location.. Topography in the general area is broad flat or rounded ridges generally sloping in a north or westerly direction. Ridges are intersected with draws or deep canyons. Canyon walls may become excessively steep and rimmed with exposed sandstone bedrock out crops or ledges. Main Canyon is the major drainage in the area and runs in a westerly direction into Willow Creek. The Green River formation is the surface formation. Occasional seeps or springs occur in the numerous side drainages with the only flowing stream occurring below the springs where Horse Canyon and Main Canyon join. An occasional constructed pond to collect surface runoff for livestock and game watering exists.

The Horse Point State #13-1 well is a directional well proposed in the bottom of Horse Canyon. Both the minerals and surface are owned by SITLA. The bottom of Horse canyon is relatively narrow and has limited areas wide enough to facilitate well locations. At the selected site the canyon runs in a general east to west direction. Here the canyon has a narrow flattened bench that is occupied by the existing road. The reserve pit is planned in an cut on the north side of the canyon and is limited in extent by rounded vertical sandstone outcrops, which form cliffs that extend upward about 60 feet. The colluvial deposit of the side slope under the outcrops will be cut from 10 to 18 feet to form a 15' wide bench around the outside of the reserve pit. The pit will be excavated an additional 12 feet deep. The pit as planned is narrow and will be rounded on the east end to facilitate the rock outcrops in this area. On the up-drainage area between corners 6 and 7 the pad will be rounded to avoid excessive cut, however the cut at corner 6 will still be 15 feet. An existing quality road accesses the location from the east and will be ramped down as it enters the location. This is an oilfield development road not controlled by Grand County. Excavated materials from the upper-side of the location will be moved toward the southwest corner as fill. Here the fill is approximately 7 feet deep. A 10-foot jog is planned along the southeast side of the pad to avoid an incised ephemeral drainage located next to and paralleling the south slope of the canyon. As planned, the fill along the south side will not reach this draw. The center of the location is within a cut but part of the rig structure to the southwest may be on fill. Adequate compaction in the sandy soils or other means to assure rig sub-structure support must be provided here. Excess fill will exist following pad construction and reserve pit closure. Placement areas for these spoils are planned on both the north-west and north-east sides of the pad. The site is covered with large sagebrush. Mr. Jim Davis representing SITLA requested that vegetation from the location not be mixed with and piled separate from the topsoil. Mr. Davis also stated that from his standpoint he would recommend that SITLA not approve the location. He felt the canyon bottom was too tight and that access to an alternative location accessing it on top of the ridge would be less impact. These concerns were discussed with Mr. Andrew Busch representing the proponent. Mr. Bush stated they have investigated a location on top of the ridge, which will require significant new road construction. This location was rejected because of the difficulty in obtaining a BLM rights-of-way, the amount of new disturbance that would be required for the road and the distance it was from their targeted down hole location as selected from their seismic data. Because of these concerns they investigated and surveyed the proposed location recognizing it also had limitations. Mr. Busch reiterated that the company's mineral lease with SITLA would expire June 30, 2008. It was important to the company to develop this well and operate it in conjunction with an existing well farther down this same drainage. I stated that based on the development plan as proposed and my on-site observations, I would recommend the site be utilized. Mr. Ben Williams representing the Utah Division of Wildlife Resources stated the area is within crucial elk calving and deer fawning habitat but because it was on an existing road he recommended no restricting stipulations for these species. Additional he stated the impact from constructing a new road down the ridge to the south and drilling and operating a well in this area would have significant impact on these two species. Mr. Williams gave Mr. Davis and Mr. Busch copies of his wildlife evaluation

and a UDWR recommended seed mix to be used when re-vegetating the disturbed areas.

There are no seeps, springs or streams in the immediate area. A spring developed for livestock watering exist next to the road approximately 1 mile up Horse Canyon. Other small springs and seeps are likely to occur in side canyons in the general area. No drainages will be interrupted by the proposed construction and no diversions are needed.

No stability problems are expected to occur with the location as proposed. Although the area is limited in space, the selected location appears to be a suitable site for constructing a pad and operating a well.

(Lavonne Garrison (SITLA) called 06/05/08 and stated that SITLA and National Fuels had searched for a better location. No better location was found and SITLA had determined that they would approve this location-BH 06/09/08)

Surface Use Plan

Current Surface Use

Grazing
Recreational
Wildlfe Habitat

New Road Miles	Well Pad		Src Const Material	Surface Formation
0	**Width** 215	**Length** 280	Onsite	GRRV

Ancillary Facilities N

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetland N

Flora / Fauna

Vegetation is a dense big-sagebtrush type. Overall cover is good. Principal species include sagebrush, snowberry, poa sp., slender wheatgrass, festuca sp. And spring annuals.

Deer , elk , coyotes, rabbits, bear, lion, small mammals and birds. Cattle graze the area during the summer.

Soil Type and Characteristics

Shallow to moderately deep sandy loam with few exposed surface sandstone rock.

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diverson Required N

Berm Required? N

Erosion Sedimentation Control Required? N

Paleo Survey Run? N **Paleo Potental Observed?** N **Cultural Survey Run?** **Cultural Resources?**

Reserve Pit

Site-Specific Factors		Site Ranking
Distance to Groundwater (feet)	25 to 75	15
Distance to Surface Water (feet)	300 to 1000	2
Dist. Nearest Municipal Well (ft)	>5280	0
Distance to Other Wells (feet)	>1320	0
Native Soil Type	Mod permeability	10
Fluid Type	Fresh Water	5
Drill Cuttings	Normal Rock	0
Annual Precipitation (inches)	10 to 20	5
Affected Populations	<10	0
Presence Nearby Utility Conduits	Not Present	0
	Final Score	37 1 **Sensitivity Level**

Characteristics / Requirements

A reserve pit 65' by 130' and 12' deep tapered to 40 feet wide on the east end located in an area of cut is planned on the southeast corner of the location. No stabilization problems are expected. A 16-mil liner with a felt sub liner as needed, will be required.

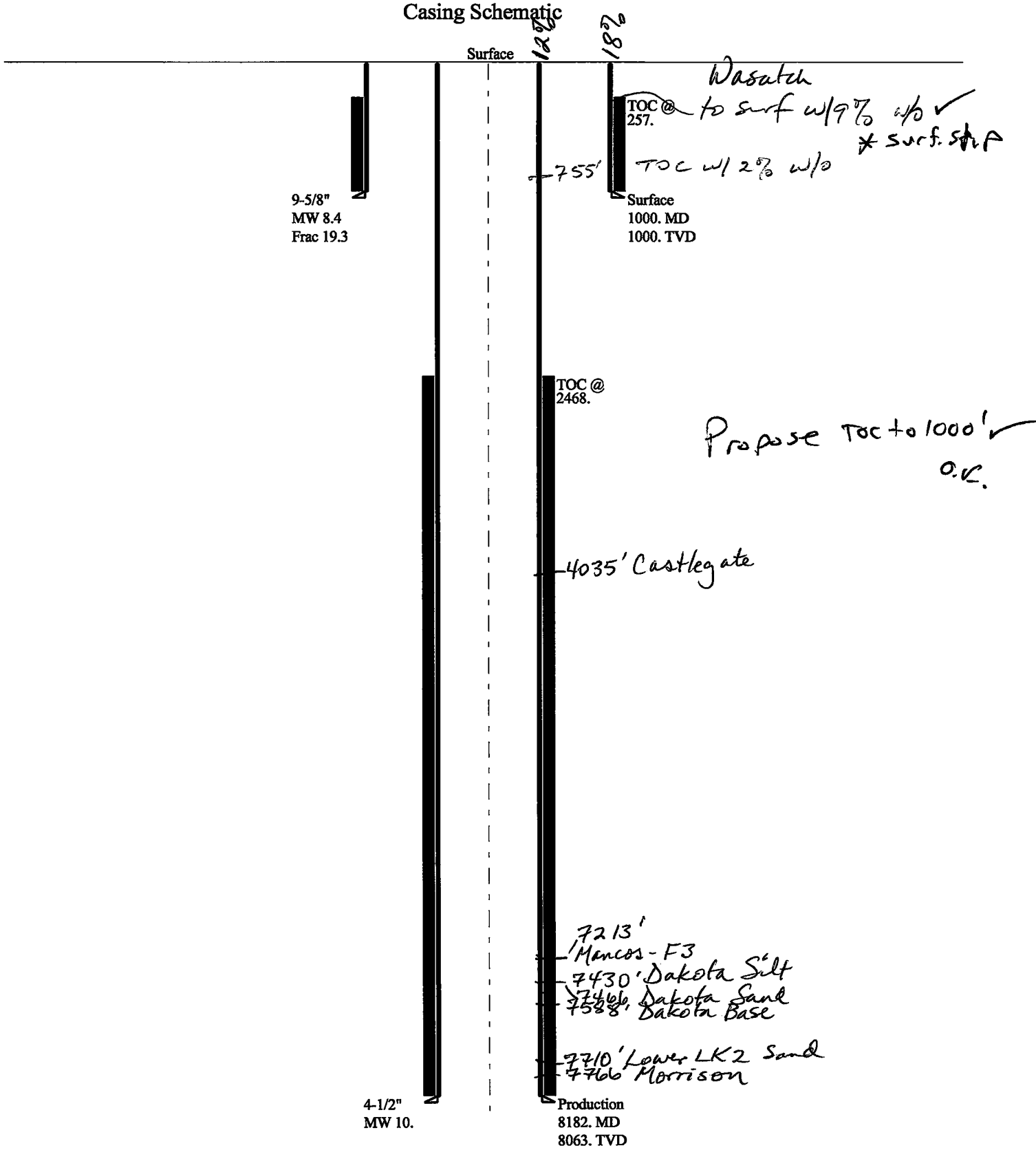
Closed Loop Mud Required? N **Liner Required?** Y **Liner Thickness** 16 **Pit Underlayment Required?** Y

Other Observations / Comments

Floyd Bartlett	5/29/2008
Evaluator	**Date / Time**

2008-05 Nat Fuel Horse Point ST 13-1

Casing Schematic



Well name:	**2008-05 Nat Fuel Horse Point ST 13-1**
Operator:	**National Fuel Corporation**
String type:	Surface
Project ID:	43-019-31579
Location:	Grand County

Design parameters:

Collapse
Mud weight: 8.400 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 880 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 1,000 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on air weight.
Neutral point: 876 ft

Environment:
H2S considered? No
Surface temperature: 65 °F
Bottom hole temperature: 79 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 185 ft

Cement top: 257 ft

Non-directional string.

Re subsequent strings:
Next setting depth: 8,063 ft
Next mud weight: 10.000 ppg
Next setting BHP: 4,188 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 1,000 ft
Injection pressure: 1,000 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft^3)
1	1000	9.625	36.00	J-55	ST&C	1000	1000	8.796	434.1

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	436	2020	4.629	1000	3520	3.52	36	394	10.94 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Minerals
Phone: 810-538-5357
FAX: 801-359-3940
Date: May 29,2008
Salt Lake City, Utah

ENGINEERING STIPULATIONS: NONE
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.
Collapse is based on a vertical depth of 1000 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes.
Burst strength is not adjusted for tension.

Well name:	**2008-05 Nat Fuel Horse Point ST 13-1**
Operator:	**National Fuel Corporation**
String type:	Production
Project ID:	43-019-31579
Location:	Grand County

Design parameters:

Collapse
Mud weight: 10.000 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 2,415 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 4,188 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on air weight.
Neutral point: 6,973 ft

Environment:
H2S considered? No
Surface temperature: 65 °F
Bottom hole temperature: 178 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 368 ft

Cement top: 2,468 ft

Directional Info - Build & Hold
Kick-off point 1100 ft
Departure at shoe: 1198 ft
Maximum dogleg: 2 °/100ft
Inclination at shoe: 0 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft^3)
1	8182	4.5	11.60	N-80	LT&C	8063	8182	3.875	714

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	4188	6350	1.516	4188	7780	1.86	94	223	2.38 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Minerals
Phone: 810-538-5357
FAX: 801-359-3940
Date: May 29,2008
Salt Lake City, Utah

ENGINEERING STIPULATIONS: NONE
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.
Collapse is based on a vertical depth of 8063 ft, a mud weight of 10 ppg The casing is considered to be evacuated for collapse purposes.
Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

BOPE REVIEW — Nat. Fuel Horse Point State 13-1 API 43-019-31579

INPUT

Well Name	Nat. Fuel Horse Point State 13-1 API 43-019-31579			
	String 1	String 2		
Casing Size (")	9 5/8	4 1/2		
Setting Depth (TVD)	1000	8182		
Previous Shoe Setting Depth (TVD)	60	2000		
Max Mud Weight (ppg)	8.4	9.2		
BOPE Proposed (psi)	500	3000		
Casing Internal Yield (psi)	3520	7780		
Operators Max Anticipated Pressure (psi)	1800	4.2 ppg		

Calculations	String 1	9 5/8 "	
Max BHP [psi]	.052*Setting Depth*MW =	437	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	317	YES ✓ Air Drill to surface shoe
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	217	YES
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	230	← NO ok.
Required Casing/BOPE Test Pressure		1000	psi
*Max Pressure Allowed @ Previous Casing Shoe =		60	psi

Calculations	String 2	4 1/2 "	
Max BHP [psi]	.052*Setting Depth*MW =	3914	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	2932	YES ✓
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	2114	YES
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	2554	← NO
Required Casing/BOPE Test Pressure		3000	psi
*Max Pressure Allowed @ Previous Casing Shoe =		2000	psi *Assumes 1psi/ft frac gradient

From: Jim Davis
To: abusch@national-fuel.com; dthompson@national-fuel.com; Mason, Diana
Date: 6/9/2008 4:22 PM
Subject: SITLA approval for the Horse Point State 13-1

CC: Bonner, Ed; Garrison, LaVonne

Clearance for the Horse Point State 13-1 well (API 4301931597) is hereby granted. If you have any questions, please contact me. Thanks.

Jim Davis
Utah Trust Lands Administration
jimdavis1@utah.gov
Phone: (801) 538-5156

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

June 10, 2008

National Fuel Corporation
8400 E Prentice Ave., Ste. 1100
Greenwood Village, CO 80111-2926

Re: Horse Point State 13-1 Well, 2630' FSL, 942' FWL, SW NW, Sec. 1, T. 16 South, R. 23 East, Bottom Location 1450' FSL, 740' FWL, NW SW, Sec. 1, T. 16 South, R. 23 East, Grand County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-019-31579.

Sincerely,

Gil Hunt
Associate Director

pab
Enclosures

cc: Grand County Assessor
SITLA

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • *www.ogm.utah.gov*

UTAH DNR
OIL, GAS & MINING

Operator: National Fuel Corporation

Well Name & Number Horse Point State 13-1

API Number: 43-019-31579

Lease: ML-48045

Location:	SW NW	**Sec.** 1	**T.** 16 South	**R.** 23 East
Bottom Location:	NW SW	**Sec.** 1	**T.** 16 South	**R.** 23 East

Conditions of Approval

1. **General**

   Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. **Notification Requirements**

   The operator is required to notify the Division of Oil, Gas and Mining of the following action during drilling of this well:

   - 24 hours prior to cementing or testing casing – contact Dan Jarvis
   - 24 hours prior to testing blowout prevention equipment – contact Dan Jarvis
   - 24 hours prior to spudding the well – contact Carol Daniels
   - Within 24 hours of any emergency changes made to the approved drilling program – contact Dustin Doucet
   - Prior to commencing operations to plug and abandon the well – contact Dan Jarvis

   The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

   - Plugging and abandonment or significant plug back of this well – contact Dustin Doucet
   - Any changes to the approved drilling plan – contact Dustin Doucet

   The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voice mail message if the person is not available to take the call):

   - Dan Jarvis at: (801) 538-5338 office (801) 942-0871 home
   - Carol Daniels at: (801) 538-5284 office
   - Dustin Doucet at: (801) 538-5281 office (801) 733-0983 home

3. **Reporting Requirements**

   All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.

5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)

6. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

7. Cement volume for the 4 1/2" production string shall be determined from actual hole diameter in order to place cement from the pipe setting depth back to 1000' MD as indicated in the submitted drilling plan.

8. Surface casing shall be cemented to the surface.

CONFIDENTIAL

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Company: **National Fuel Corp.**

Well Name: **Horse Point ST 13-1**

API No: **43-019-31579** Lease Type: **State**

Section **01** Township **16S** Range **23E** County **Grand**

Drilling Contractor _____ Rig # _____

SPUDDED:

Date **6-18-08**

Time **1:00 PM**

How **Dry**

Drilling will Commence: _____

Reported by **Daryl**

Telephone # **435-828-5667**

Date **6-24-08** **Signed** **RM**

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator: National Fuel Corporation

Operator Account Number: N 8060

Address: 8400 E. Prentice Ave. - Suite 1100

city Greenwood Village

state CO zip 80111

Phone Number: (303) 220-7772

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301931579	Horse Point State 13-1		SWNW	1	16S	23E	Grand
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
A	99999	16936	6/18/2008			6/30/08	
Comments: MRSN CONFIDENTIAL							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
Comments:							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
Comments:							

ACTION CODES:

- **A** - Establish new entity for new well (single well only)
- **B** - Add new well to existing entity (group or unit well)
- **C** - Re-assign well from one existing entity to another existing entity
- **D** - Re-assign well from one existing entity to a new entity
- **E** - Other (Explain in 'comments' section)

Diane Thompson
Name (Please Print)

Diane Thompson
Signature

President
Title

6/26/2008
Date

RECEIVED
JUN 26 2008
DIV. OF OIL, GAS & MINING

(5/2000)

CONFIDENTIAL

FORM 9

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

5. LEASE DESIGNATION AND SERIAL NUMBER: ML-48045

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: NA

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

7. UNIT or CA AGREEMENT NAME: NA

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER

8. WELL NAME and NUMBER: Horse Point State #13-1

2. NAME OF OPERATOR: National Fuel Corporation

9. API NUMBER: 4301931579

3. ADDRESS OF OPERATOR: 8400 E Prentice #1100 CITY Greenwood Vill STATE Co ZIP 80111

PHONE NUMBER: (303) 220-7772

10. FIELD AND POOL, OR WILDCAT: Undesignated

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 942' FWL, 2630' FSL

COUNTY: Grand

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNW 1 16S 23E

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☑ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion: 6/26/2008	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☐ OTHER: Notice of spud and setting surface csg
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The purpose of this Sundry Notice is for notification of spudding and completion of setting conductor and surface casing on the Horse Point State #13-1. The well was spudded on 6/18/08. 14 inch conductor pipe was set to depth of 90' and cemented back to surface. 9 5/8 inch surface casing was set to depth of 1005' and cemented back to surface. Surface casing head has been installed. We have contracted Frontier Drilling to drill the production hole and are currently waiting for Frontier #1 to become available.

RECEIVED
JUL 15 2008
DIV. OF OIL, GAS & MINING

NAME (PLEASE PRINT) Andrew Busch TITLE V.P. of Operations

SIGNATURE DATE 7/15/2008

(This space for State use only)

(5/2000) (See Instructions on Reverse Side)

CONFIDENTIAL

NATIONAL FUEL CORPORATION

DAILY DRILLING REPORT

API # 43-019-31579

Well Name & No.	Horse Point State 13-1	Contractor & Rig No.	Frontier 1			Date	08/03/08
Legal Location	sw 1/4 nw 1/4	Section	1	T 16 S	R 23 E	Report No.	13
County	Grand	State	UT	GLE 7450	KBE 7461	Spud Date	06/18/08
Report Time Depth	6,445	Drilling Progress	375	Formation	MANCOS		
Activity at Report Time	TRIPPING						
Deepest Casing Set	95/8"	Set @	1005	Burst	3,520		

Current

RPM's	Bit Wt.	Pump Pres.	Diesel Used	Cum.
55/45	15 - 40	1200	660	4446

Bits

Bit No.	Size	Make	Type	Serial No.	Jets	Depth In	Last Depth	Feet	Rot. Hrs
2	7 7/8"	STC	MSI516	JX5786	5 x 15	5,330	6,445	1,115	44.50
3	7 7/8"	STC	FHI 23	PK0845	3 X 16	6,445		-	

Grading

Bit No.	Cum. Hrs	Cum. Ft	Ft/Hr	Teeth	Bearings	Gauge	Current Mud Motor Hrs.	Rotating	Reaming
2	44.50	1,115	25.1	1 X 2				44.5	

Mud Prop's

Mud Wt.	Vis. (Sec)	Plastic Vis.	Yield Pt.	Gels	API Filtrate	HT Filtrate	Filter Cake	LCM	
9.30	50.0	12.0	15.0	6/18	11.9		1/32		
Solids	**Liquid**	**Oil**	**Sand**	**pH**	**Chlorides**	**Hardness**	**Alk (Mud)**	**Alk (Pf/Mf)**	**Mud Salt**
5.00%	95.00%		0.2	8.0	6,500	60	-	0/4.20	

Direct. Surveys

	#1	#2	#3	#4	#5	#6	#7	#8	#9
Depth	6,026	6,089	6,153	6,217	6,280	6,344			
Inclination	13.06	12.94	13.13	12.94	12.00	11.31			
Direction	190.2	191.1	191.1	190.1	191.2	192.8			

Pumps

Pump No.	Model	SPM	Pressure	Gal/Str	GPM	BPM	AVDP	AVDC
1	PZ-8	120.0	1200	2.94	353	8.40	167	#VALUE!
2	PZ-8			0.00				

Slow P. Rate

	Depth	SPM	BPM	Pressure		Hole	Pits	Total
	5,791	63	4.41	303	Mud Volumes	325	257	582

Drill String

	Length	OD	ID	Wt/Ft	Eff. Wt.		Size	Grade	Weight
HWDP	920.67	4.500		54.12	42,751	Drill Pipe	4.50	G	16.60
	Static	**Slack-off**	**Pick-up**				**On Loc.**	**On Rack**	**In Hole**
String Weight	125.0	110.0	145.0			Drill Pipe Joints	233		170

BHA

Item	Bit	MOTOR	DBL PIN	MWD TC	MWD ES	NMDC	0	0	Total
Length	1.00	28.99	2.11	19.68	10.58	30.17			92.53
OD	7 7/8"	6.500	6.250	6.250	6.250	6.250			
ID			2.250			2.250			

From	To	Hours	Description of Operations
600	1000	4.00	DRILL ROTATE & SLIDE F/ 6070- 6175 HAVING TROUBLE SLIDING
1000	1130	1.50	WIPER TRIP 10 STANDS UP TO 5200'
1130	1400	2.50	DRILL ROTATE & SLIDE F/ 6175 - 6237 TAKING SURVEYS
1400	1430	0.50	RIG SERVICE
1430	2300	8.50	DRILL ROTATE & SLIDE TAKING SURVEYS F/6237- 6445
2300	2400	1.00	CIRCULATE & BUILD SLUG
2400	600	6.00	TRIP F/ INSERT BIT HAVING TROUBLE SLIDING & BUILDIN ANGLE W/ PDC
0		-	
0		-	
0		-	
0		-	
0		-	
0		-	
0		-	
0		-	
Total		24.00	

Other

Well Costs

Previous Total	**452,436**
Daily Cost	**37,312**
Cumulative Total	**489,748**

Reported By: DARRYL KNOP

Company:

NATIONAL FUEL CORPORATION
864-20 Road, Unit E
Fruita, Colo 81521
Office (970)-858-7490

CONFIDENTIAL

NATIONAL FUEL CORPORATION

DAILY DRILLING REPORT

43-019-31579

Well Name & No.	Horse Point State 13-1	Contractor & Rig No.	Frontier 1			Date	08/10/08
Legal Location	sw 1/4 nw 1/4	Section	1	T 16 S	R 23 E	Report No.	20
County	Grand	State	UT	GLE 7450	KBE 7461	Spud Date	06/18/08
Report Time Depth	8,188	Drilling Progress			Formation	MORRISON	
Activity at Report Time	TEAR DOWN						
Deepest Casing Set	4 1/2"	Set @	8183	Burst	7,780		

Current

RPM's	Bit Wt.	Pump Pres.	Diesel Used	Cum.
			100	7505

Bits

Bit No.	Size	Make	Type	Serial No.	Jets	Depth In	Last Depth	Feet	Rot. Hrs
									29.50
								-	

Grading

Bit No.	Cum. Hrs	Cum. Ft	Ft/Hr	Teeth	Bearings	Gauge	Current Mud Motor Hrs.	Rotating	Reaming

Mud Prop's

Mud Wt.	Vis. (Sec)	Plastic Vis.	Yield Pt.	Gels	API Filtrate	HT Filtrate	Filter Cake	LCM	
Solids	Liquid	Oil	Sand	pH	Chlorides	Hardness	Alk (Mud)	Alk (Pf/Mf)	Mud Salt

Direct. Surveys

	#1	#2	#3	#4	#5	#6	#7	#8	#9
Depth									
Inclination									
Direction									

Pumps

Pump No.	Model	SPM	Pressure	Gal/Str	GPM	BPM	AVDP	AVDC
1	PZ-8				-	-	167	#DIV/0!
2	PZ-8							

Slow P. Rate

	Depth	SPM	BPM	Pressure	Mud Volumes	Hole	Pits	Total
			-					

Drill String

	Length	OD	ID	Wt/Ft	Eff. Wt.		Size	Grade	Weight
HWDP				-	-	Drill Pipe			
	Static	Slack-off	Pick-up				On Loc.	On Rack	In Hole
String Weight						Drill Pipe Joints	243		

BHA

Item								Total
Length								0.00
OD								
ID								

From	To	Hours	Description of Operations
600	630	0.50	RIG DOWN HALLIBURTON
630	730	1.00	PICK UP STACK CUT OFF CASING
730	1100	3.50	CLEAN MUD TANKS
1100	1800	7.00	TEAR DOWN
1800		-	
0		-	RIG RELEASED @ 1100 AM AUGUST 9, 2008
0		-	
0		-	
0		-	
0		-	
0		-	
0		-	
0		-	
0		-	
0		-	
0		-	
Total		12.00	

RECEIVED
AUG 12 2008
DIV. OF OIL, GAS & MINING

Other

Well Costs

Previous Total	994,043
Daily Cost	113,554
Cumulative Total	#######
	1,107,597

Reported By: DARRYL KNOP

Company:

NATIONAL FUEL CORPORATION
864-20 Road, Unit E
Fruita, Colo 81521
Office (970)-858-7490

CONFIDENTIAL FORM 9

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER:	ML-48045
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	NA
7. UNIT or CA AGREEMENT NAME:	NA
1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER	8. WELL NAME and NUMBER: Horse Point State #13-1
2. NAME OF OPERATOR: National Fuel Corporation	9. API NUMBER: 4301931579
3. ADDRESS OF OPERATOR: 8400 E Prentice #1100 CITY Greenwood Vill STATE Co ZIP 80111	PHONE NUMBER: (303) 220-7772
	10. FIELD AND POOL, OR WILDCAT: Undesignated

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 942' FWL, 2630' FSL — COUNTY: Grand

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNW 1 16S 23E — STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ NOTICE OF INTENT (Submit in Duplicate)	☑ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start: 8/25/2008	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Begin initial completion
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

This Sundry Notice is being submitted for notification of National Fuel Corporations plans for commencing completion operations on the Horse Point State #13-1. Please review the following procedure. 1) Move in completion rig. 2) Instal BOP. 3) Run in with bit and scraper to TD. 3) Circulate the volume of the hole with 3% KCl water. 4) Pull tubing. 5) Pressure test casing to 4500#. 6) Log from TD to top of cement with CBL,CCL and GR. 7) Run in tubing and swab fluid down to 4700'. 8) Pull tubing. 9) Run in with 3 1/8" expendable perf gun and perforate 7758' to 7770' at 2 shots per foot. 10) RIH with packer and tbg. 11) Break down perforated interval with 1000 gallons of 7 1/2% HCl and ball sealers. 12) Pull tubing and remove packer. 13) Run in with tubing. 14) Swab back fluid and test for production. Will decide after testing if further stimulation is needed.

COPY SENT TO OPERATOR
Date: 8·27·2008
Initials: KS

NAME (PLEASE PRINT) Andrew Busch — TITLE V.P. of Operations

SIGNATURE Andy Busch (by DT) — DATE 8/20/2008

(This space for State use only)

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS AND MINING
DATE: 8/26/08
BY: Dustin Doucet

RECEIVED
AUG 25 2008
DIV. OF OIL, GAS & MINING

(5/2000) (See Instructions on Reverse Side)

CONFIDENTIAL

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER: ML-48045
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: NA
7. UNIT or CA AGREEMENT NAME: NA
8. WELL NAME and NUMBER: Horse Point State #13-1
9. API NUMBER: 4301931579
10. FIELD AND POOL, OR WILDCAT: Undesignated

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER
2. NAME OF OPERATOR: National Fuel Corporation
3. ADDRESS OF OPERATOR: 8400 E Prentice #1100 CITY Greenwood Vill STATE Co ZIP 80111 PHONE NUMBER: (303) 220-7772
4. LOCATION OF WELL
FOOTAGES AT SURFACE: 942' FWL, 2630' FSL COUNTY: Grand
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNW 1 16S 23E STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ NOTICE OF INTENT (Submit in Duplicate)	☑ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start: 10/23/2008	☐ ALTER CASING	☑ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☑ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Continue initial completion. Add perf.
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

This Sundry Notice is being submitted for notification of National Fuel Corporations plans for perforating additional zones in the Horse Point State #13-1. The following intervals will be perforated at 2 shots per foot and tested for production. Intervals will be tested individually and stimulated if tests warrant.

7844' to 7847'
7782' to 7790'
7750' to 7754'
7742' to 7746'

The Cedar Mtn is currently perforated at 7758' to 7770' and proved to be uneconomic after testing as shown in the attached report. If the above intervals prove to be uneconomic, well will be plugged back to 7730' with a permanent Cast Iron Bridge Plug cement dump bailed on top. After plugging back, the Dakota will be perforated at 7620' to 7638' at 2 shots per foot and tested for production. Further stimulation will be designed after initial testing.

COPY SENT TO OPERATOR
Date: 11·16·2008
Initials: KS

NAME (PLEASE PRINT) Andrew Busch TITLE V.P. of Operations
SIGNATURE Andy Busch (By DT) DATE 10/21/2008

(This space for State use only)

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 11/3/08
BY:
* 50' minimum of cement shall be placed on CIBP.

RECEIVED
NOV 03 2008
DIV. OF OIL, GAS & MINING

(5/2000) (See Instructions on Reverse Side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER: ML-48045

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A

7. UNIT or CA AGREEMENT NAME: N/A

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER

8. WELL NAME and NUMBER: HORSE POINT STATE #13-1

2. NAME OF OPERATOR: NATIONAL FUEL CORPORATION

9. API NUMBER: 4301931579

3. ADDRESS OF OPERATOR: 8400 E PRENTICE #1100 CITY GREENWOOD VIL STATE CO ZIP 80111

PHONE NUMBER: (303) 220-7772

10. FIELD AND POOL, OR WILDCAT: UNDESIGNATED

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 942' FWL, 2630' FSL

COUNTY: GRAND

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNW 1 16S 23E

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start: _____	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
_____	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: Request Wildcat designation.
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Plat map has been submitted showing Horse Point State #13-1 well does not have any producing wells within a one mile radius of the wellsite. The producing formation is Dakota. Based on this information, we believe well qualifies for severance tax exemption under Section 59-5-102(2)(d).

NAME (PLEASE PRINT) Rose Greenfield TITLE Controller

SIGNATURE Rose Greenfield DATE 2/23/2010

(This space for State use only)

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING

DATE: 3/9/10

BY: [signature]

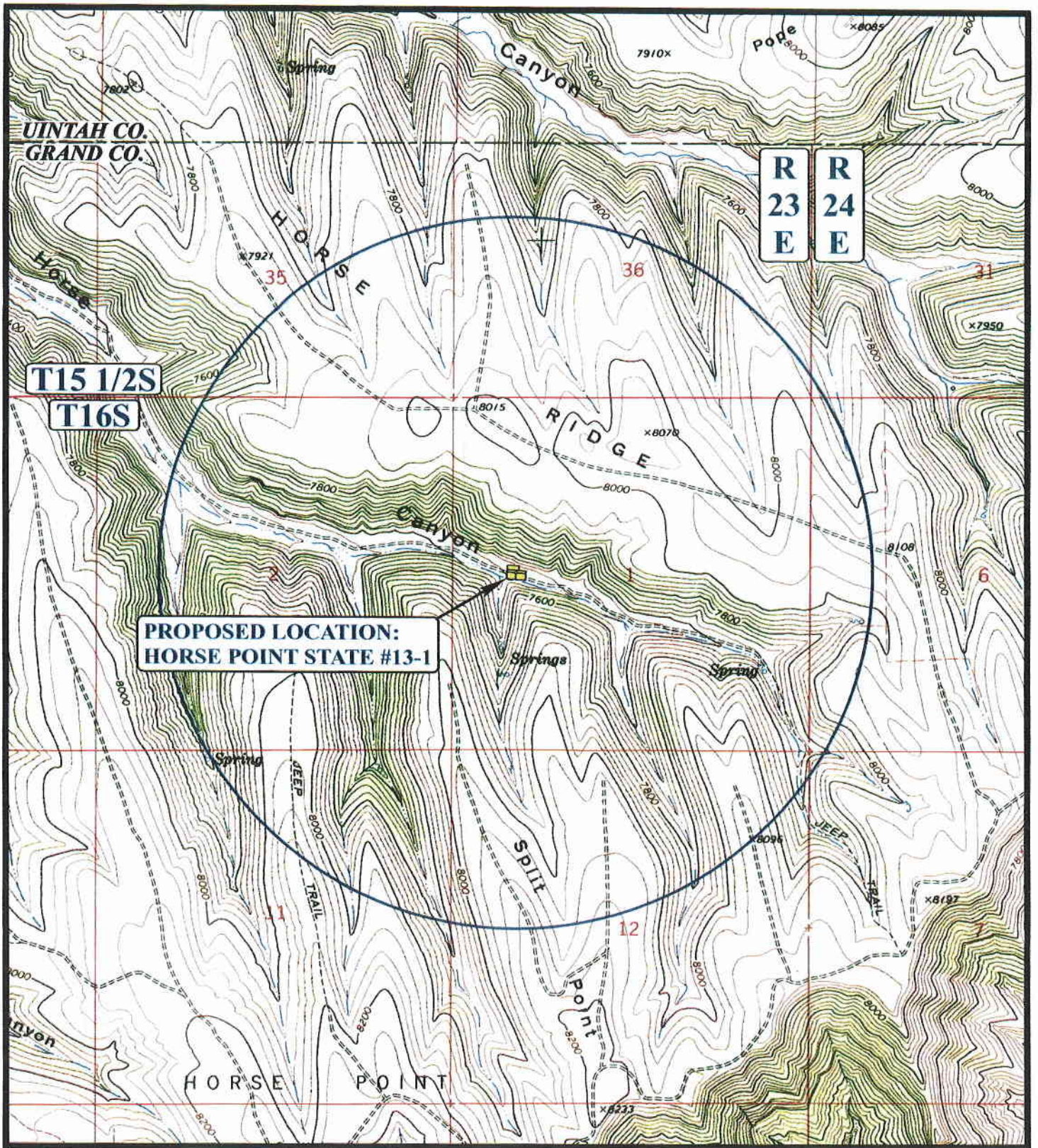
* See attached Statement of Basis

cc: tax Commission (emailed)

RECEIVED
FEB 23 2010
DIV. OF OIL, GAS & MINING

(See Instructions on Reverse Side)

/2000)



LEGEND:

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED

N

NATIONAL FUEL CORPORATION

HORSE POINT STATE #13-1
SECTION 1, T16S, R23E, S.L.B.&M.
2630' FSL 942' FWL

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	05 MONTH	12 DAY	08 YEAR	C TOPO
SCALE: 1" = 2000'	DRAWN BY: C.P.	REVISED: 00-00-00		

DIVISION OF OIL, GAS AND MINING

Wildcat Well Determination

STATEMENT OF BASIS

Applicant: National Fuel Corporation

Location: SWNW Sec. 1 T16S, R23E, Grand County, Utah

WELL NAME: Horse Point State 13-1 **API #:** 43-019-31579

FINDINGS

1. The subject well was spud on June 18, 2008. Total depth was reached on August 7, 2008 and the well was produced in July 2009.
2. The subject well is currently listed as shut-in. Initial completions were attempted in the Cedar Mountain in 2008, but no production was reported and initial reports noted the original Cedar Mountain perforated interval as uneconomic. It did produce in limited quantities from the Cedar Mountain and Dakota formations from July 2009 to December 2009. It was then recompleted on January 19, 2010 in the Dakota formation according to records. Test data reported from December 2009 indicate well is probably a commercial well.
3. The subject well was > 1 mile from any known production in all formations at the date of first commercial production on December 2, 2009.
4. No other wells have been drilled in the area of review. See Attachment A for summary of current wells within the one (1) mile area of review.

CONCLUSIONS

Based on the findings above the Division has determined the Horse Point State 13-1 well was drilled into an unknown area for the Dakota and Cedar Mountain formations. No other requests for a wildcat determination have been received or approved by the Division within the area of review. The production data is fairly limited from the referenced formations however the test data in the Dakota formation appears to be commercial. Based upon the submitted information and review, the Division finds that this well qualifies for the severance tax exemption under Section 59-5-102(2)(d) for wildcat wells for the referenced formations. This determination was made in accordance with Oil and Gas General Conservation Rule R649-3-35 and the definition of a wildcat well in R649-1-1.

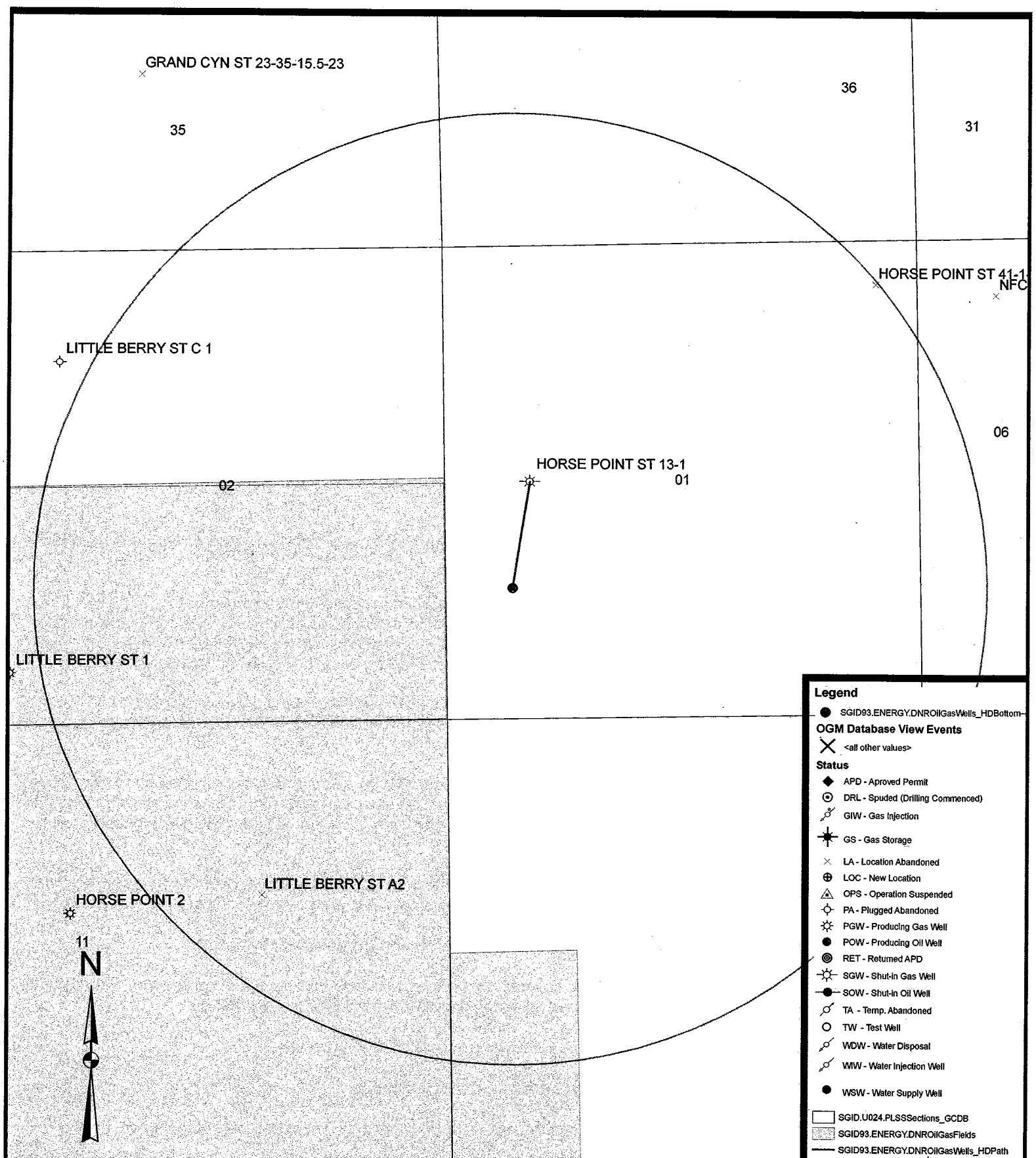
Reviewer(s): Dustin K. Doucet DKD Date: 3/9/2010

ATTACHMENT A

1 Mile Area of Review

API	WELL_NAME	Well Status	QTR	Sect	Town	Range	Cum Oil	Cum Gas	Field Type	Dx From Well(ft)	Rotary Spud	Date TD Reached	Date First Produced	Producing Formation(s)
4301931579	HORSE POINT ST 13-1	S	SWNW	01	160S	230E	355	420	E	0	6/18/2008	8/7/2008	7/1/2009	Dakota, Cedar Mountain (plugged back)

Wildcat Designation Area of Review
Horse Point State 13-1 Well



FORM 6

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM

Operator: National Fuel Corporation
Operator Account Number: N 8060
Address: 8400 E Prentice Ave. Suite 1100
city Greenwood Village
state CO zip 80111
Phone Number: (303) 220-7772

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301931579	Horse Point State #13-1		SWNW	1	16S	23E	Grand
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
E	16936	16936	6/18/2008			1/19/2010	

Comments: Change producing formation from Morrison to Dakota BHL = NWSW CONFIDENTIAL

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	

Comments:

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	

Comments:

RECEIVED
MAR 15 2010
DIV. OF OIL, GAS & MINING

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

Rose Greenfield
Name (Please Print)
Rose Greenfield
Signature
Controller
Title
3/10/2010
Date

(5/2000)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

CONFIDENTIAL

AMENDED REPORT (Highlight changes)

FORM 8

5. LEASE DESIGNATION AND SERIAL NUMBER: ML-48045

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: NA

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ DRY ☐ OTHER

7. UNIT or CA AGREEMENT NAME: NA

b. TYPE OF WORK: NEW WELL ☑ HORIZ. LATS. ☐ DEEP-EN ☐ RE-ENTRY ☐ DIFF. RESVR. ☐ OTHER

8. WELL NAME and NUMBER: Horse Point State #13-1

2. NAME OF OPERATOR: National Fuel Corporation

9. API NUMBER: 4301931579

3. ADDRESS OF OPERATOR: 8400 E Prentice, #1100 CITY Greenwood Vill STATE Co ZIP 80111

PHONE NUMBER: (303) 220-7772

10 FIELD AND POOL, OR WILDCAT: Wildcat

4. LOCATION OF WELL (FOOTAGES)

970-858-7490

AT SURFACE: 2630' FSL, 942' FWL

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNW 1 16S 23E

AT TOP PRODUCING INTERVAL REPORTED BELOW: 1450' FSL, 740' FWL

AT TOTAL DEPTH: 1450 FSL, 740 FWL BHL Reviewed by HSM

12. COUNTY: Grand

13. STATE: UTAH

14. DATE SPUDDED: 6/18/2008

15. DATE T.D. REACHED: 8/7/2008

16. DATE COMPLETED: 1/19/2010 ABANDONED ☐ READY TO PRODUCE ☑

17. ELEVATIONS (DF, RKB, RT, GL): 7449.5' GL

18. TOTAL DEPTH: MD 8,188 TVD 8,069

19. PLUG BACK T.D.: MD 7,720 TVD 7,601

20. IF MULTIPLE COMPLETIONS, HOW MANY? *

21. DEPTH BRIDGE PLUG SET: MD 7,720 TVD 7,601

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)

Schlumberger Platform Express, Bore Hole Comp Sonic, Caliper, Delta T,

23.

WAS WELL CORED?	NO ☑	YES ☐	(Submit analysis)
WAS DST RUN?	NO ☑	YES ☐	(Submit report)
DIRECTIONAL SURVEY?	NO ☐	YES ☑	(Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
17 1/2"	13 3/8 H-40	48#	0	60		G 55	10	Surface(cir)	NA
12 1/4	9 5/8 J-55	36#	0	1,005		G 450	90	Surface(cir)	NA
7 7/8	4 1/2 N-80	11.6#	0	8,183		N2&G 1,525	368	5120' CBL	100K

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8"	7,692							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A) Dakota	7,618	7,640	7,499	7,521
(B)				
(C)				
(D)				

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
7,620 7,638	.385	36	Open ☑ Squeezed ☐
			Open ☐ Squeezed ☐
			Open ☐ Squeezed ☐
			Open ☐ Squeezed ☐

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
7620 to 7638	Fracture, 101,080 lbs of 20/40 sand

29. ENCLOSED ATTACHMENTS:

☑ ELECTRICAL/MECHANICAL LOGS ☐ GEOLOGIC REPORT ☐ DST REPORT ☑ DIRECTIONAL SURVEY

☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION ☐ CORE ANALYSIS ☐ OTHER:

30. WELL STATUS: Shut in

RECEIVED
FEB 22 2010
DIV. OF OIL, GAS & MINING

(5/2000)

(CONTINUED ON BACK)

31. INITIAL PRODUCTION — **INTERVAL A (As shown in item #26)**

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
		12/2/2009		24			30	250	5	Choke
CHOKE SIZE:	**TBG. PRESS.**	**CSG. PRESS.**	**API GRAVITY**	**BTU – GAS**	**GAS/OIL RATIO**	**24 HR PRODUCTION RATES: →**	**OIL – BBL:**	**GAS – MCF:**	**WATER – BBL:**	**INTERVAL STATUS:**
24/64	200	450					30	250	5	Shut in

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	**TBG. PRESS.**	**CSG. PRESS.**	**API GRAVITY**	**BTU – GAS**	**GAS/OIL RATIO**	**24 HR PRODUCTION RATES: →**	**OIL – BBL:**	**GAS – MCF:**	**WATER – BBL:**	**INTERVAL STATUS:**

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	**TBG. PRESS.**	**CSG. PRESS.**	**API GRAVITY**	**BTU – GAS**	**GAS/OIL RATIO**	**24 HR PRODUCTION RATES: →**	**OIL – BBL:**	**GAS – MCF:**	**WATER – BBL:**	**INTERVAL STATUS:**

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	**TBG. PRESS.**	**CSG. PRESS.**	**API GRAVITY**	**BTU – GAS**	**GAS/OIL RATIO**	**24 HR PRODUCTION RATES: →**	**OIL – BBL:**	**GAS – MCF:**	**WATER – BBL:**	**INTERVAL STATUS:**

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

Vented and Sold

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
Dakota	7,620	7,638	Sandstone / Oil and Gas	Wasatch	0
				Castlegate	3,862
				Mancos	3,914
				Prarie Canyon	4,602
				Dakota Silt	7,547
				Dakota Sand	7,617
				Morrison	7,864

35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) Andrew Busch TITLE VP of Operations

SIGNATURE Andrew Busch Digitally signed by Andrew Busch DN: cn=Andrew Busch, o, ou, email=abusch@national-fuel.com, c=US Date: 2010.02.12 09:50:44 -07'00' DATE 2/12/2010

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

(5/2000)

COMPUTALOG
Drilling Services

Client : NATIONAL FUEL CORPORATION
Well : HORSE POINT STATE #13-1
Location : GRAND COUNTY, UTAH
License :

Date : 8/7/2008
File : 4014927

UWI #:

Vertical Section Calculated Along Azimuth 189.58°
KB Elevation = 7465.00ft GR. Elevation = 7449.50ft

	MD	Inc	Azi	TVD	North	East	V'Sect	D'Leg	Build	Turn
	ft	deg	deg	ft	ft	ft	ft	°/100	°/100	°/100
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	1037.00	0.06	112.20	1037.00	-0.21	0.50	0.12	0.01	0.01	10.82
2	1103.00	1.06	151.69	1103.00	-0.76	0.82	0.61	1.54	1.52	59.83
3	1165.00	3.81	195.95	1164.94	-3.24	0.53	3.11	5.06	4.44	71.39
4	1228.00	6.06	206.20	1227.70	-8.24	-1.51	8.38	3.82	3.57	16.27
5	1291.00	7.88	203.82	1290.23	-15.17	-4.73	15.75	2.92	2.89	-3.78
6	1353.00	6.13	203.70	1351.77	-22.09	-7.77	23.08	2.82	-2.82	-0.19
7	1413.00	7.38	199.20	1411.35	-28.67	-10.33	29.99	2.26	2.08	-7.50
8	1481.00	9.69	195.45	1478.59	-38.31	-13.29	39.99	3.49	3.40	-5.51
9	1544.00	11.50	196.20	1540.52	-49.45	-16.45	51.50	2.88	2.87	1.19
10	1607.00	11.44	192.07	1602.26	-61.59	-19.51	63.98	1.31	-0.10	-6.56
11	1671.00	11.63	190.20	1664.97	-74.15	-21.98	76.77	0.66	0.30	-2.92
12	1734.00	11.56	189.82	1726.68	-86.62	-24.18	89.43	0.16	-0.11	-0.60
13	1830.00	11.94	188.45	1820.67	-105.92	-27.28	108.98	0.49	0.40	-1.43
14	1925.00	12.00	187.57	1913.60	-125.43	-30.03	128.68	0.20	0.06	-0.93
15	2021.00	12.06	187.80	2007.50	-145.26	-32.70	148.67	0.08	0.06	0.24
16	2116.00	12.19	185.82	2100.38	-165.07	-35.07	168.60	0.46	0.14	-2.08
17	2211.00	10.88	184.45	2193.46	-183.98	-36.78	187.54	1.41	-1.38	-1.44
18	2307.00	10.63	182.07	2287.77	-201.87	-37.80	205.34	0.53	-0.26	-2.48
19	2403.00	10.63	187.82	2382.13	-219.49	-39.33	222.97	1.10	0.00	5.99
20	2498.00	10.56	187.57	2475.51	-236.80	-41.67	240.43	0.09	-0.07	-0.26
21	2594.00	10.50	186.82	2569.89	-254.20	-43.87	257.96	0.16	-0.06	-0.78
22	2689.00	10.25	186.95	2663.34	-271.19	-45.92	275.05	0.26	-0.26	0.14
23	2784.00	10.88	189.57	2756.73	-288.42	-48.43	292.46	0.83	0.66	2.76
24	2880.00	10.38	189.20	2851.08	-305.89	-51.32	310.17	0.53	-0.52	-0.39
25	2975.00	11.55	189.95	2944.34	-323.71	-54.33	328.23	1.24	1.23	0.79
26	3071.00	11.69	187.70	3038.38	-342.81	-57.29	347.57	0.49	0.15	-2.34
27	3166.00	11.19	187.45	3131.49	-361.49	-59.78	366.40	0.53	-0.53	-0.26
28	3261.00	10.56	187.32	3224.78	-379.26	-62.08	384.31	0.66	-0.66	-0.14
29	3356.00	11.00	190.45	3318.11	-396.81	-64.84	402.07	0.77	0.46	3.29
30	3451.00	11.38	192.70	3411.30	-414.87	-68.54	420.49	0.61	0.40	2.37
31	3547.00	13.19	193.07	3505.10	-434.78	-73.10	440.88	1.89	1.89	0.39
32	3643.00	13.06	191.45	3598.59	-456.08	-77.73	462.65	0.41	-0.14	-1.69
33	3738.00	11.69	191.20	3691.38	-476.04	-81.73	483.00	1.44	-1.44	-0.26
34	3833.00	10.38	190.82	3784.62	-493.89	-85.21	501.18	1.38	-1.38	-0.40
35	3928.00	11.25	188.95	3877.93	-511.45	-88.25	519.00	0.99	0.92	-1.97
36	4024.00	11.94	189.07	3971.97	-530.50	-91.28	538.30	0.72	0.72	0.13
37	4120.00	11.13	186.20	4066.04	-549.52	-93.84	557.48	1.03	-0.84	-2.99
38	4216.00	11.06	188.45	4160.24	-567.84	-96.20	575.93	0.46	-0.07	2.34

Client : NATIONAL FUEL CORPORATION
Well : HORSE POINT STATE #13-1
Location : GRAND COUNTY, UTAH
License :

UWI #:

Vertical Section Calculated Along Azimuth 189.58°
KB Elevation = 7465.00ft GR. Elevation = 7449.50ft

	MD	Inc	Azi	TVD	North	East	V'Sect	D'Leg	Build	Turn
	ft	deg	deg	ft	ft	ft	ft	°/100	°/100	°/100
39	4312.00	9.69	188.32	4254.67	-584.95	-98.72	593.22	1.43	-1.43	-0.14
40	4407.00	9.31	191.57	4348.37	-600.39	-101.42	608.89	0.69	-0.40	3.42
41	4502.00	11.25	191.32	4441.84	-617.00	-104.78	625.83	2.04	2.04	-0.26
42	4598.00	11.06	193.45	4536.02	-635.14	-108.76	644.38	0.47	-0.20	2.22
43	4693.00	11.63	193.57	4629.17	-653.31	-113.12	663.03	0.60	0.60	0.13
44	4788.00	13.19	191.07	4721.95	-673.26	-117.45	683.41	1.74	1.64	-2.63
45	4883.00	11.06	190.07	4814.82	-692.87	-121.13	703.36	2.25	-2.24	-1.05
46	4978.00	10.06	193.82	4908.21	-709.90	-124.70	720.75	1.28	-1.05	3.95
47	5074.00	10.00	191.07	5002.75	-726.22	-128.31	737.45	0.50	-0.06	-2.86
48	5169.00	10.63	191.70	5096.21	-742.89	-131.67	754.45	0.67	0.66	0.66
49	5264.00	10.63	191.82	5189.58	-760.05	-135.24	771.96	0.02	0.00	0.13
50	5327.00	10.50	189.20	5251.51	-771.41	-137.35	783.51	0.79	-0.21	-4.16
51	5391.00	10.25	192.45	5314.47	-782.72	-139.51	795.02	0.99	-0.39	5.08
52	5454.00	9.75	188.95	5376.51	-793.47	-141.54	805.96	1.25	-0.79	-5.56
53	5517.00	10.44	187.82	5438.53	-804.39	-143.15	817.00	1.14	1.10	-1.79
54	5580.00	10.44	188.57	5500.49	-815.69	-144.78	828.41	0.22	0.00	1.19
55	5644.00	10.26	186.95	5563.45	-827.08	-146.33	839.90	0.53	-0.28	-2.53
56	5707.00	10.19	182.95	5625.45	-838.22	-147.30	851.04	1.13	-0.11	-6.35
57	5771.00	11.75	179.57	5688.28	-850.39	-147.54	863.08	2.64	2.44	-5.28
58	5835.00	12.63	180.45	5750.84	-863.90	-147.55	876.41	1.41	1.37	1.37
59	5899.00	13.13	183.20	5813.23	-878.15	-148.01	890.54	1.24	0.78	4.30
60	5962.00	12.56	187.95	5874.65	-892.08	-149.35	904.50	1.90	-0.90	7.54
61	6026.00	13.06	190.20	5937.06	-906.09	-151.60	918.69	1.10	0.78	3.52
62	6089.00	12.94	191.07	5998.44	-920.02	-154.21	932.86	0.36	-0.19	1.38
63	6153.00	13.13	191.07	6060.79	-934.19	-156.98	947.29	0.30	0.30	0.00
64	6217.00	12.94	190.07	6123.14	-948.38	-159.63	961.72	0.46	-0.30	-1.56
65	6280.00	12.00	191.20	6184.66	-961.75	-162.14	975.32	1.54	-1.49	1.79
66	6344.00	11.31	192.82	6247.34	-974.39	-164.82	988.23	1.19	-1.08	2.53
67	6408.00	11.13	193.70	6310.11	-986.51	-167.68	1000.66	0.39	-0.28	1.37
68	6471.00	12.44	192.70	6371.79	-999.04	-170.61	1013.50	2.10	2.08	-1.59
69	6535.00	12.00	185.07	6434.34	-1012.39	-172.71	1027.02	2.61	-0.69	-11.92
70	6599.00	12.25	181.82	6496.91	-1025.81	-173.52	1040.38	1.14	0.39	-5.08
71	6663.00	12.44	182.20	6559.43	-1039.48	-174.00	1053.94	0.32	0.30	0.59
72	6726.00	13.44	183.20	6620.83	-1053.57	-174.67	1067.95	1.63	1.59	1.59
73	6790.00	13.31	187.32	6683.10	-1068.31	-176.02	1082.70	1.50	-0.20	6.44
74	6854.00	13.38	186.32	6745.37	-1082.97	-177.77	1097.46	0.38	0.11	-1.56
75	6918.00	13.19	187.95	6807.66	-1097.57	-179.60	1112.15	0.66	-0.30	2.55
76	6982.00	11.75	185.95	6870.15	-1111.28	-181.28	1125.95	2.35	-2.25	-3.13

Client : NATIONAL FUEL CORPORATION
Well : HORSE POINT STATE #13-1
Location : GRAND COUNTY, UTAH
License :

UWI #:

Vertical Section Calculated Along Azimuth 189.58°
KB Elevation = 7465.00ft GR. Elevation = 7449.50ft

	MD	Inc	Azi	TVD	North	East	V'Sect	D'Leg	Build	Turn
	ft	deg	deg	ft	ft	ft	ft	°/100	°/100	°/100
77	7045.00	10.44	185.57	6931.97	-1123.34	-182.50	1138.05	2.08	-2.08	-0.60
78	7109.00	9.94	187.32	6994.96	-1134.59	-183.77	1149.35	0.92	-0.78	2.73
79	7173.00	10.00	185.57	7057.99	-1145.60	-185.01	1160.41	0.48	0.09	-2.73
80	7237.00	9.44	182.20	7121.07	-1156.38	-185.75	1171.16	1.25	-0.87	-5.27
81	7300.00	8.75	179.20	7183.28	-1166.33	-185.89	1181.00	1.33	-1.10	-4.76
82	7363.00	7.69	190.82	7245.64	-1175.26	-186.61	1189.93	3.12	-1.68	18.44
83	7426.00	6.13	200.45	7308.18	-1182.55	-188.58	1197.45	3.08	-2.48	15.29
84	7490.00	5.38	201.82	7371.86	-1188.54	-190.89	1203.73	1.19	-1.17	2.14
85	7554.00	4.31	201.45	7435.63	-1193.57	-192.88	1209.02	1.67	-1.67	-0.58
86	7617.00	2.38	198.57	7498.52	-1197.01	-194.16	1212.63	3.07	-3.06	-4.57
87	7681.00	2.13	201.70	7562.47	-1199.37	-195.03	1215.11	0.44	-0.39	4.89
88	7745.00	1.94	195.45	7626.43	-1201.52	-195.75	1217.35	0.46	-0.30	-9.77
89	7789.00	1.44	201.70	7670.41	-1202.76	-196.16	1218.63	1.21	-1.14	14.20
90	7884.00	1.31	202.95	7765.38	-1204.86	-197.02	1220.85	0.14	-0.14	1.32
91	7978.00	1.50	194.95	7859.35	-1207.04	-197.76	1223.12	0.29	0.20	-8.51
92	8073.00	1.63	199.57	7954.32	-1209.52	-198.53	1225.69	0.19	0.14	4.86
93	8136.00	1.44	207.57	8017.29	-1211.06	-199.20	1227.32	0.45	-0.30	12.70
				Extrapolation to the bit						
EXT	8188.00	1.28	214.17	8069.28	-1212.12	-199.83	1228.48	0.43	-0.30	12.70

Bottom Hole Closure 1228.48ft Along Azimuth 189.36°

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER:	ML-48045
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	NA
7. UNIT or CA AGREEMENT NAME:	NA
1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER	8. WELL NAME and NUMBER: Horse Point State #13-1
2. NAME OF OPERATOR: National Fuel Corporation	9. API NUMBER: 4301931579
3. ADDRESS OF OPERATOR: 8400 E Prentice #735 CITY Greenwood Vill STATE Co ZIP 80111	PHONE NUMBER: (303) 220-7772
	10. FIELD AND POOL, OR WILDCAT: Undesignated

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 942' FWL, 2630' FSL — COUNTY: Grand

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNW 1 16S 23E — STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ NOTICE OF INTENT (Submit in Duplicate)	☑ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start: 6/1/2013	☐ ALTER CASING	☑ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☑ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☐ OTHER:
	☐ CONVERT WELL TYPE	☑ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

This Sundry Notice is being submitted for notification of National Fuel Corporations(NFC) plans for re-completing the Horse Point State #13-1 in the Mancos formation. This well is currently completed in the Dakota formation. During this re-completion, the Dakota will be isolated from the Mancos with a cast iron bridge plug. If Mancos proves to be profitable, the Dakota formation will remain isolated/shut in, from the Mancos. Attached for your review is the proposed re-completion procedure.

COPY SENT TO OPERATOR
Date: 5.9.2013
Initials: KS

NAME (PLEASE PRINT) Andrew Busch — TITLE V.P. of Operations

SIGNATURE Andrew Busch — DATE 4/22/2013

(This space for State use only)

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 5/9/2013
BY: DKD

APR 2 5 2013

* CIBP should be set @ 7550' needs to be set on top of CIBP @ 7550' to permanently isolate the Dakota Fm. For permanent plugback, 100' of cement

(5/2000) (See Instructions on Reverse Side)

National Fuel Corporation
Horse Point State #13-1
Mancos Recompletion

1. MIRU.
2. ND wellhead. NU BOP.
3. PU & RIH with tbg.
4. Release and POOH with RBP at 7230'.
5. RIH with WLS CIBP and set at 6000'
6. RIH perforate 4 squeeze holes at 4905'.
7. Establish circulation through squeeze holes.
8. RIH with WLS CR and set at 4865'.
9. RIH with CR stinger and tbg.
10. MIRU cementing services.
11. Sting in to CR and establish circulation.
12. Pump and displace cement(200' mimimum above top proposed perf).
13. Sting out of CR and reverse circulate tbg volume.
14. POOH with tbg.
15. Let cement cure(1 week).
16. MIRU wireline & run CBL.
17. NU frac tree.
18. Pressure test csg and tree.
19. RDMO workover rig.
20. MIRU wireline and perforate 4791-95, 4786-88, 4777-85 1 day prior to frac.
21. MIRU Cal Frac.
22. Frac 4777-95 perfs.
23. Set flow through composite frac plug at 4762'.
24. Perforate 4739-50, 4722-32, 4713-19.
25. Frac 4713 – 50 perfs.
26. Set flow through composite frac plug at 4700'
27. Perforate 4673 -80, 4662-71.
28. Frac 4662- 80 perfs.
29. RD Cal Frac and begin flowback.
30. MIRU workover rig.
31. ND frac tree. NU BOP.
32. RIH with drill collars, tbg and bit.
33. Drill out flow through plugs and clean out below bottom perf at 4795.
34. POOH with BHA.
35. RIH with tbg.
36. ND BOP. NU wellhead.
37. Test flow.

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: ML-48045

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
HORSE POINT ST 13-1

2. NAME OF OPERATOR:
NATIONAL FUEL CORPORATION

9. API NUMBER:
43019315790000

3. ADDRESS OF OPERATOR:
8400 E Prentice Avenue Suite 735 , Greenwood Village, CO, 80111

PHONE NUMBER:
970 260-8128

9. FIELD and POOL or WILDCAT:
UNDESIGNATED

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
2630 FSL 0942 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SWNW Section: 01 Township: 16.0S Range: 23.0E Meridian: S

COUNTY:
GRAND

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	✓ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
✓ SUBSEQUENT REPORT Date of Work Completion: 8/28/2013	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	✓ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	✓ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	✓ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

This Subsequent Sundry Notice is being submitted for notification of National Fuel Corporations(NFC) completion of re-completing the Horse Point State #13-1 in the Mancos formation. This well is currently being flowed to onsite production tank in order to clean up residual CO2 remaining from frac. Once gas stream has reached pipeline acceptable inert gas content, the well will be put on line for sales. Additionally, the area of the existing well pad that was expanded to accommodate frac equipment, will be recontoured and reseeded no later than October 31st, 2013. Attached for your review is the recompletion report.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
September 27, 2013

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Andrew Busch	970 260-8128	VP Operations
SIGNATURE		**DATE**
N/A		8/28/2013

RECEIVED: Aug. 28, 2013

National Fuel Corporation
Horse Point State #13-1
Mancos Recompletion

6/7/13 – MIRU W.P. Incorporated rig. ND wellhead. NU BOP.

6/10/13 – PU, strapped & RIH in order with RBP retrieving head, 1 jt, SSN, and 179 jts of original string. Culled many jts due to rod cut and heavy paraffin. PU 58 jts that was from the HP #43-32 to reach RBP at 7230'. Latched on to, and released RBP. POOH and stood back 29 stands. Began laying down #13-1 string. Laid down 100 jts. Shut in csg and tbg. Will not use any of original string for completion operations. Will need to haul an additional 2000' to location for work string. SDFD 7:00PM.

6/11/13 – Csg – 0#. Tbg – 0#. POOH and laid down remaining tbg. Dug out surface csg valve and opened. No pressure on surface csg. MIRU DLD Wireline Service. PU RIH with 4 ½" CIBP. Set at 7555'. POOH with setting tool. H-Twenty Transportation on location with 130 bbls of 3% KCl water. Filled rig tank. Filled csg 1600' from surface. RIH with dump bailer. Dump bailed 8 sks of class "G" cement on CIBP in 6 runs. Laid down bailer. PU & RIH with perf gun. Perforated 8 squeeze holes at 4905'. POOH with perf gun. All shots fired. PU & RIH with cement retainer. Fluid level had dropped to 1750'. Set retainer at 4865'. POOH with setting tool. RD wireline. Shut in well. SDFD 7:00PM.

6/12/13 – No pressure on well. Loaded and delivered 72 jts of used 2 3/8" tbg to location. RIH with CR stinger and 29 stands in derrick. PU & RIH with an additional 96 jts to 4838'. NU stripping head and rubber. Established circulation down tbg and up through csg. Broke circulation with 14 bbls pumped. First 10bbls of returns all oil. Circulated tbg and csg volume with 3% KCl water. SDFD 5:00PM

6/13/13 – Broke circulation again to confirm clean returns at surface. Pressure tested csg to 1000#. Dropped test ball down tbg and tested string to 1000#. Circulated ball out of tbg. PU & RIH with 1 jt and stung into CR at 4865'. Established rate through squeeze perfs at 4905'. Pumping 1 bbl/min at 1100#. Pumped 15 bbls with no change in pressure and no signs of communication between 4 ½" X 9 5/8" annulus. SDFD 11:00PM. Met with Calfrac and Ferrus to discuss location and equipment layout for frac.

6/14/13 – MIRU Pro Petro cementers. Pressured up csg to 700#. Pumped 11 bbls of water down tbg. Established rate of 2 bpm at 1400#. Mixed and pumped 125 sks of 14.2 PPG, 1.26 yield, premium 50/50 Poz cement down tbg. Displaced with 18.6 bbls of fresh water. Stung out of retainer. Pulled up 15' and reverse circulated well. Circulated approximately ¼ bbl of cement to surface. Circulated for an additional 30 minutes after cementing. RD Pro Petro. POOH with tbg and stinger. Shut in well.

RECEIVED: Aug. 28, 2013

6/17/13 – MIRU Mesa Wireline Service. PU & RIH with GR, CCL & CBL. Fluid level 600'. Logged from 4857' to 4200'. Log indicates good cement top from squeeze at 4779'. Remaining bond looks questionable from 4779' to 4520'. POOH with tools. PU & RIH with 6 shot squeeze gun and perforated at 4754'. POOH with gun. All shots fired. RD wireline. Shut in well. SDFD 12:30PM.

6/18/13 – H-Twenty delivered 90 bbls of 3% KCl water to rig tank. Hauled drill collars and power swivel to location. Filled csg to surface. Attempted to pump into squeeze perfs at 4754'. Pressured up to 1000#. Pressure dropping 100# per 5 minutes. Pressured repeatedly after allowing pressure to bleed off, with no increase in pump in rate. Decided to CBL log under pressure. SDFD 11:00AM.

6/19/13 – MIRU Lone Wolf Wireline. PU & RIH with GR, CCL & CBL. Fluid level 600'(9.5 bbls). Pressured up csg to 1000#. Logged from 4850' to 3800'. No significant improvement in bond. Bled down csg. POOH with tools. RD wireline. SDFD 11:00AM. Returned to town. Consulted with cementing company and wireline company regarding bond log. Consensus is that there is adequate bond to perforate and frac.

6/21/13 – Dalbo moved in frac tanks. RD & moved rig, rig tank and tbg to #43-32 location. H-Twenty delivering water to frac tanks. Knight delivered and installed frac tree. L&L Roustabouts removed surface equipment and began pad expansion for frac.

6/22 to 7/1/13 – Ferus moving in CO2 storage and CO2. Calfrac moving in sand and equipment.

7/1/13 – MIRU Mesa Wireline. PU & RIH with first stage perf gun. Perforated in order 4800' to 04', 4778' to 80', 4769' to 77'. Perforated at 2 spf with 23 gram, 0.34" dia, 26" penetration, hero charges. POOH with spent gun. RD wireline. SDFD 7:00PM.

7/2/13 – 4:00AM - Mobilized Calfrac and Ferus crew to location. Prime equipment. Held safety meeting. Pressure tested lines to 5000#. Max pressure set at 4700#.
<u>Stage 1</u>
Starting pressure – 0#
Breakdown pressure – 1833#
Average treating pressure – 1148#
Max treating pressure – 2514#
Average treating rate – 20.5 bpm
Pumped 98,580# of 20/40 white sand in 70% quality CO2 foam
Flushed to bottom perf with 85.7 bbls of Linear Gel
ISIP – 205#
5 min – 96#

RECEIVED: Aug. 28, 2013

RU wireline. RIH with 4 ½" composite flow through frac plug and 2nd stage gun. Set plug at 4752'. Perforated 4731' to 42', 4714' to 24', 4705' to 11'. POOH with spent gun. Pressure tested lines. Pumped stage 2.

Stage 2
Starting pressure – 90#
Breakdown pressure – 870#
Average treating pressure – 1289#
Max treating pressure – 2739#
Average treating rate – 19.6 bpm
Pumped 140,820# of 20/40 white sand in 70% quality CO2 foam
Flushed to bottom perf with 84.1 bbls of Linear Gel
ISIP – 325#
5 min – 264#

RU wireline. RIH with 4 ½" composite flow through frac plug and 3rd stage gun. Set plug at 4692'. Perforated 4665' to 72', 4654' to 63', 4642' to 43'. POOH with spent gun. Released wireline. Pressure tested lines. Pumped stage 3.

Stage 3
Starting pressure – 120#
Breakdown pressure – 1134#
Average treating pressure – 1147#
Max treating pressure – 2585#
Average treating rate – 23.7 bpm
Pumped 101,800# of 20/40 white sand in 70% quality CO2 foam
Flushed to bottom perf with 72.4 bbls of Linear Gel
ISIP – 398#
5 min – 279#

RD Calfrac and Ferus. Will start flowback tomorrow morning. SDFD 5:00PM.

7/3/13 – 7:00AM. Wellhead csg pressure – 200#. No pressure on surface csg. Dalbo moved in 400 bbl flowback tank. Plumbed flow line to tank. 10:30AM Wellhead pressure – 415#. Opened to flowback tank through 16/64 choke. Blew dry CO2 for 20 minutes then started slugging fluid.
12:00PM – Csg 450# - Slugging CO2 and fluid.
1:00PM – Csg 510# - Slugging CO2 and fluid.
2:00PM – Csg 600# - Slugging CO2 and fluid. 50 bbls in tank.
3:00PM – Csg 650# - Blowing dry CO2.
9:00PM – Csg 710# - Blowing CO2 with occasional slugs. 75 bbls in tank.
10:00PM – Csg 720# - Blowing dry CO2. Increased choke size to 20/64.
11:00PM – Csg 615#- Carrying steady fluid with CO2.
7/4/13 -
12:00AM – Csg 710# - Carrying steady fluid with CO2.
2:00AM – Csg 640# - Carrying steady fluid with CO2. 109 bbls in tank.

RECEIVED: Aug. 28, 2013

5:00AM – Csg 645# - Carrying steady fluid with CO2. 133 bbls in tank.
6:00AM – Csg 640# - Carrying steady fluid with CO2 and sufficient methane to be detected on combustible gas detector. 146 bbls in tank.
8:30AM – Csg 715# - Carrying steady fluid with CO2. Combustible gas detector indicating higher methane content. 180 bbls in tank.
10:45AM – Csg 725# - Carrying steady fluid and gas. 200 bbls in tank.
11:45AM - Csg 725# - Carrying steady fluid and gas. 215 bbls in tank.
12:00PM – H-Twenty on location. Pulled fluid from flowback tank. Hauled 202 bbls to disposal. 12 bbls left in tank.
8:00PM - Csg 744# - Carrying steady fluid and gas. 88 bbls in tank. Made 76 bbls to flowback tank in last 8 hours. 9.5 bbl/hour. Total recovered since frac = 291 bbls.
7/5/13 –
7:30AM - Csg 695# - Carrying steady fluid and gas. 190 bbls in tank.. Made 114 bbls to flowback tank in last 11.5 hours. 9.9 bbl/hour. Total recovered since frac = 405 bbls.
8:30AM - Csg 690# - Carrying steady fluid and gas. 197 bbls in tank.Total recovered since frac = 412 bbls. Made 7 bbls in last hour.
9:30AM - Csg 670# - Carrying steady fluid and gas. 205 bbls in tank.Total recovered since frac = 420 bbls. Made 8 bbls in last hour.
10:00AM - Csg 670# - Carrying steady fluid and gas. 208 bbls in tank.Total recovered since frac = 423 bbls. Made 3 bbls in last 1/2 hour. H-Twenty on location. Shut in well while pulling fluid from flowback tank. Hauled 186 bbls to disposal. 21 bbls left in tank. Increased choke size to 22/64. No indications of sand in returns.Turned well back on at 10:45AM.
12:00PM - Csg 660# - Carrying steady fluid and gas. 30 bbls in tank.Total recovered since frac = 432 bbls. Made 9 bbls in last 1.25 hours. Attempted to flare. Gas will try to ignite but will not burn steady.
1:00PM - Csg 625# - Carrying steady fluid and gas. 39 bbls in tank.Total recovered since frac = 441 bbls. Made 9 bbls in last 1 hour period.
2:00PM - Csg 620# - Carrying steady fluid and gas. 48 bbls in tank.Total recovered since frac = 450 bbls. Made 9 bbls in last 1 hour period.
3:00PM - Csg 620# - Carrying steady fluid and gas. 57 bbls in tank.Total recovered since frac = 459 bbls. Made 9 bbls in last 1 hour period. Increased choke size to 24/64.
4:00PM - Csg 600# - Carrying steady fluid and gas. 68 bbls in tank.Total recovered since frac = 470 bbls. Made 11 bbls in last 1 hour period. Attempted to flare. Gas burning for 2 to 3 seconds, then extinguishes.
5:00PM - Csg 585# - Carrying steady fluid and gas. 75 bbls in tank.Total recovered since frac = 477 bbls. Made 7 bbls in last 1 hour period. Attempted to flare. Gas burning for 3 to 4 seconds, then extinguishes.
6:00PM - Csg 570# - Carrying steady fluid and gas. 84 bbls in tank.Total recovered since frac = 486 bbls. Total fluid pumped during frac = 1932 bbls. 1446 bbls left to recover. Made 9 bbls in last 1 hour period. Attempted to flare. Gas burning for 15 to 40 seconds. Shut in well for the weekend.

RECEIVED: Aug. 28, 2013

7/8/13 –
9:30AM - Csg 950#. Decreased choke size to 20/64. Opened well to flowback tank.
11:30AM – Csg 900#. No fluid production.
1:30PM – Csg 880#. No fluid production. Increased choke size to 24/64.
2:30AM – Csg 730#. No fluid production.
3:30AM – Csg 630#. No fluid production.
4:30PM - Csg 540# - Carrying steady fluid and gas. 93 bbls in tank. Total recovered since frac = 495 bbls.
5:30PM - Csg 545# - Carrying steady fluid and gas. 98 bbls in tank. Total recovered since frac = 500 bbls. Made 5 bbls in last 1 hour period. Decreased choke size to 20/64 for the overnight period. Lit flare stack. Gas burning for 1 to 2 minute intervals before being snuffed out by CO2.

7/9/13 –
7:30AM – Csg 425#. Carrying steady fluid and gas. 175 bbls in tank. Total recovered since frac = 577 bbls. Made 77 bbls in last 14 hour period(5.5 bbl/hr). Increased choke size to 22/64. Lit flare stack. Gas burning continuous.
8:30AM – Csg 405#. Carrying steady fluid and gas. 185 bbls in tank. Total recovered since frac = 587 bbls. Made 10 bbls in last 1 hour period.
9:30AM – Csg 402#. Carrying steady fluid and gas. 190 bbls in tank. Total recovered since frac = 592 bbls. Made 5 bbls in last 1 hour period.
10:30AM – Csg 395#. Carrying steady fluid and gas. 195 bbls in tank. Total recovered since frac = 597 bbls. Made 5 bbls in last 1 hour period. H-Twenty on location. Pulled fluid from flowback tank. Hauled 120 bbls to disposal. 75 bbls left in tank.
11:30AM – Csg 390#. Carrying steady fluid and gas. 82 bbls in tank. Total recovered since frac = 604 bbls. Made 7 bbls in last 1 hour period. Increased choke size to 24/64.
5:30PM – Csg 315#. Carrying steady fluid and gas. 119 bbls in tank. Total recovered since frac = 641 bbls. Made 37 bbls in last 6 hour period. Increased choke size to 26/64.

7/10/13 –
8:00AM - Csg 220#. Carrying light amount of fluid and steady gas. 192 bbls in tank. Made 73 bbls in last 14.5 hour period(5 bbl/hr).Total recovered since frac = 714 bbls. MIRU Flow Data to perform gas analysis. Pinched back flow rate to reduce water in gas stream. Unable to get accurate data from analysis due to gas chromatograph calibration issues. H-Twenty on location. Pulled fluid from flowback tank. Hauled 122 bbls to disposal. 70 bbls left in tank. Opened well fully to tank through 26/64 choke at10:30AM.
7:00PM – Csg 195#. Carrying steady fluid and gas. 97 bbls in tank. Made 27 bbls in last 8.5 hour period(3.1 bbl/hr). Total recovered since frac = 741 bbls.Increased choke size to 32/64. Lit flare stack. Gas burning continuous.

7/11/13 –
11:15AM – Csg 105#. Carrying steady fluid and gas. 156 bbls in tank. Made 59 bbls in last 16.25 hour period(3.6 bbl/hr). Total recovered since frac = 800 bbls. H-Twenty on

RECEIVED: Aug. 28, 2013

location. Pulled fluid from flowback tank. Hauled 135 bbls to disposal. 30 bbls left in tank.
5:30PM – Csg 90#. Carrying steady fluid and gas. 55 bbls in tank. Total recovered since frac = 825 bbls. Made 25 bbls in last 6.25 hour period(4 bbl/hr).

7/12/13-
5:30PM - Carrying steady gas and light fluid. 102 bbls in tank. Made 50 bbls in last 24 hour period(2 bbl/hr).Total recovered since frac = 875 bbls. Shut in for the weekend. Will resume flow on Monday and collect gas sample.

7/15/13 –
4:30PM – Csg 790#. Opened to tank through 16/64 choke. Let flow for 10 minutes then collected gas sample. Moved in pump and rig tank. H-Twenty on location. Pulled fluid from flowback tank. Hauled 100 bbls to disposal. 2 bbls left in tank.
Will collect another sample tomorrow morning.

7/16/13 –
2:00PM – Csg 455#. No fluid made overnight. Collected gas sample. MIRU W.P. Inc rig. MI tbg on float. Moved flowback tank to north end of location and plumbed flow lines.

7/17/13 –
3:00PM – Csg 190#. Carrying steady gas and light fluid. 4 bbls in tank. Made 2 bbls in last 25 hour period.Total recovered since frac = 877 bbls. Increased choke to 26/64. Waiting on repair of blind rams on BOP's.

7/18/13-
2:00PM – Csg 105#. Carrying steady gas and light fluid. 61 bbls in tank. Made 57 bbls in last 23 hour period(2.4 bbl/hr).Total recovered since frac = 934 bbls. Moved BOP's and power swivel to location. Met with Cudd nitrogen services to discuss drill out procedure. Shut in well.

7/19/13-
7:30AM – Csg 600#. MIRU Mesa Wireline. PU & RIH with 3.75" gage ring to 4645'. Did not tag fill. POOH with gage ring. PU & RIH with 4 ½" Magnum composite BP. Set plug at 4630'. POOH with setting tool. RD wireline. Blew down well. ND frac tree. NU BOP, spacer spool and stripping head. PU and RIH in order with 3.75" medium tooth cone bit, pump off bit sub, SN and 149 jts of tbg. Lightly tagged plug at 4630'. Laid down 1 jt. Installed string float on top jt of string. Installed stripping rubber. RU power swivel. SDFD 6:30PM.

7/22/13 –
10:00AM MIRU Cudd Energy N2 Service. Late getting to location due to road conditions. Removed chokes from flow lines. Broke circulation at 800 scf/m N2, and ½ bbl/m 3% KCl with foaming agent. Drilled out composite BP at 4630', and flow through composite plugs at 4692' and 4752'. Drillled and cleaned down a total of 8 jts to 4857'(PBTD). Circulated hole for 10 minutes with foamed N2 then circulated 120% of

csg and tbg volume with clean N2. RD Cudd. POOH and laid down 8 jts. Installed bleed off tool on string float. Left well flowing to tank through 32/64" choke. Csg 160#. 160 bbls in flowback tank. Pumped 135 with N2. Well made 25 bbls while circulating and drilling. Total recovered since frac = 959 bbls. SDFD 7:30PM.

7/23/13 –
8:00AM – Csg 100#. Blowing and carrying fluid. 180 bbls in tank. Made 20 bbls in last 12.5 hours. Blew down tbg. PU & RIH with 3 jts to 4723.11'. Stripped in tbg hanger and landed hot. ND BOP. NU wellhead. RU Cudd. Pressured up tbg with N2 to 2510#. Pumped off bit sub. Circulated well clean. Circulated 20 bbls of water to tank. 200 bbls in tank. Total recovered since frac = 999 bbls. RD and released Cudd. Hooked flow line to tbg. Csg – 520#. Tbg- 520#. Opened tbg to flowback tank through 26/64" choke at 1:00PM. 4:00PM – Csg 475#. Tbg 145. Blowing and carrying fluid. 208 bbls in tank. Made 8 bbls in last 3 hours. Total recovered since frac = 1007 bbls.

Tubing Detail

150 jts of 4.7#, 2 3/8" tbg	- 4709.86'
SN	- 1.10'
Bit sub	- .65'
KB	- 11.50'
Total	**- 4723.11'**

7/24/13-
9:00AM – Csg 405#. Tbg 120#. Blowing and carrying fluid. 250 bbls in tank. Made 42 bbls in last 17 hours(2.4 bbls/hr). Total recovered since frac = 1049 bbls. H –Twenty pulled 234 bbls from flow back tank and hauled to disposal. 16 bbls in tank.

7/25/13-
11:00AM – Csg 380#. Tbg 105#. Blowing and carrying fluid. 59 bbls in tank. Made 43 bbls in last 26 hours(1.65 bbls/hr). Total recovered since frac = 1092 bbls.

7/26/13-
11:00AM – Csg 350#. Tbg 100#. Blowing and carrying fluid. 102 bbls in tank. Made 43 bbls in last 24 hours(1.79 bbls/hr). Total recovered since frac = 1135 bbls. H-Twenty emptied flowback tank and hauled to disposal.

7/29/13-
11:30AM – Csg 360#. Tbg 80#. Blowing and carrying light fluid. 62 bbls in tank. Made 62 bbls in last 72.5 hours(.85 bbls/hr). Total recovered since frac = 1197 bbls. Tested gas stream for CO2 content. Tube tester indicated 21% CO2 concentration. Increased choke size to 32/64". Discovered 26/64 choke was partially plugged with composite plug debris.

7/31/13-
2:00PM – Csg 340#. Tbg 45#. Blowing and carrying light fluid. 88.5 bbls in tank. Made 26.5 bbls in last 50.5 hours(.52 bbls/hr). Total recovered since frac = 1223.5 bbls. Released rig.

RECEIVED: Aug. 28, 2013

8/1/13-
8:30AM – Csg 330#. Tbg 40#. Blowing and carrying light fluid. 97 bbls in tank. Made 8.5 bbls in last 18.5 hours(.45 bbls/hr). Total recovered since frac = 1232 bbls. Tested gas stream for CO2 content. Tube tester indicated 19.5% CO2 concentration.

8/2/13-
4:00PM – Csg 340#. Tbg 40#. Blowing and carrying light fluid. 115 bbls in tank. Made 18 bbls in last 31.5 hours(.57 bbls/hr). Total recovered since frac = 1250 bbls.

8/5/13-
2:00PM – Csg 305#. Tbg 29#. Blowing and carrying light fluid. 142 bbls in tank. Made 27 bbls in last 70 hours(.38 bbls/hr). Total recovered since frac = 1277 bbls. Tested gas stream for CO2 content. Tube tester indicated 18% CO2 concentration. Shut in well and removed choke from flow line. Opened well to flowback tank.

8/6/13-
4:00PM – Csg 225#. Tbg 4#. Blowing dry. 161 bbls in tank. Made 19 bbls in last 26 hours(.73 bbls/hr). Total recovered since frac = 1296 bbls. Dropped 1 soap stick down tbg and let dissolve for 10 minutes, then opened to flowback tank.

8/7/13-
4:00PM – Csg 232#. Tbg 6#. Blowing and carrying light fluid. 170 bbls in tank. Made 9 bbls in last 24 hours(.37 bbls/hr). Total recovered since frac = 1305 bbls. Tested gas stream for CO2 content. Tube tester indicated 17% CO2 concentration. Pulled gas sample for full analysis. Dropped 1 soap stick down tbg and let dissolve for 10 minutes. In 10 minutes Tbg - 97#, Csg – 248#. Opened to flowback tank.

8/12/13-
12:00PM – Csg 245#. Tbg 1#. Light dry blow. 213 bbls in tank. Made 43 bbls in last 116 hours(.37 bbls/hr). Total recovered since frac = 1348 bbls. Tested gas stream for CO2 content. Tube tester indicated 16% CO2 concentration. Dropped 1 soap stick down tbg and let dissolve for 10 minutes. In 10 minutes Tbg - 68#, Csg – 255#. Opened to flowback tank.

8/13/13-
12:00PM - 220 bbls in tank. Made 7 bbls in last 24 hours(.29 bbls/hr). Total recovered since frac = 1355 bbls. H-Twenty hauled 113 bbls to disposal. 102 bbls left in tank.

8/14/13-
12:00PM – Csg 280#. Tbg 1#. Light dry blow. 106 bbls in tank. Made 4 bbls in last 24 hours(.16 bbls/hr). Total recovered since frac = 1359 bbls. Dropped 1 soap stick down tbg and let dissolve for 10 minutes. In 10 minutes Tbg - 62#, Csg – 286#. Opened to flowback tank.

RECEIVED: Aug. 28, 2013

8/15/13-
2:00PM – Csg 265#. Tbg 1#. Light dry blow. 113 bbls in tank. Made 7 bbls in last 26 hours(.27 bbls/hr). Total recovered since frac = 1366 bbls. Tested gas stream for CO2 content. Tube tester indicated 15% CO2 concentration. Dropped 1 soap stick down tbg and let dissolve for 10 minutes. In 10 minutes Tbg - 57#, Csg – 278#. Opened to flowback tank.

8/20/13 –
2:00PM – Csg 279#. Tbg 1#. Light dry blow. 131 bbls in tank. Made 18 bbls in last 5 days(3.6 bbls/day). Total recovered since frac = 1384 bbls. Tested gas stream for CO2 content. Tube tester indicated 14% CO2 concentration. Dropped 1 soap stick down tbg and let dissolve for 10 minutes. In 10 minutes Tbg - 56#, Csg – 287#. Opened to flowback tank.

8/23/13 – H-Twenty emptied flowback tank. Released tank from rental. L&L Roustabouts plumbed in NFC owned tank.

8/28/13 –
2:00PM – Csg 310#. Tbg .6#. Light dry blow. Made 11 bbls in last 8 days(1.37 bbls/day). Total recovered since frac = 1395 bbls. Tested gas stream for CO2 content. Tube tester indicated 14% CO2 concentration. Dropped 1 soap stick down tbg and let dissolve for 10 minutes. In 10 minutes Tbg 55#, Csg – 318#. Opened to flowback tank.

RECEIVED: Aug. 28, 2013